

Social Questions of To-day

BACK TO THE LAND

HAROLD E. MOORE, F.S.I.

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SOCIAL QUESTIONS OF TO-DAY

EDITED BY H. DE B. GIBBINS, M.A.

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SOCIAL QUESTIONS OF TO-DAY.

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BACK TO THE LAND

BY

HAROLD E. MOORE, F.S.I.,

AUTHOR OF

"HINTS ON LAND IMPROVEMENTS," "AGRICULTURAL CO-OPERATION,
ETC.

Methuen & Co.

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1893

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DOBSON. "And he calls out among our öan men, 'The land belongs to the people.'"

DORA. "And what did *you* say to that?"

DOBSON. "'Well,' I says, 's'pose my pig's the land, and you says it belongs to the parish, and there be a thousand i' the parish, taakin' in the women and childer; and s'pose I kills my pig and gi'es it among 'em, why there wudn't be a dinner for nawbody, and I should ha' lost the pig.'"

The Promise of May.—TENNYSON.

PREFACE

THE whole of this volume was not originally written with the view of publication in its present form. The material facts in Chapter IV. have been contributed by me to various publications, while the outlines of Chapter V. were prepared in the early part of 1891, when called upon to advise General Booth as to the organization and future work of the Hadleigh Farm Colony. The plan of colonization explained in Chapter VIII. was drawn up in the summer of 1892 at the request of certain friends interested in colonization, who were acquainted with the special information I had bearing upon that subject.

Having, however, consented to publish the results of my experience on the various matters herein considered, I have entirely re-written my notes, and have embodied recent experience on all the matters mentioned. The greater part of Chapter II. appeared in the *Contemporary Review* for March 1893, but with that exception no other portion has been in print in the form in which it now appears.

HAROLD E. MOORE.



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The author expresses his thanks to those who have given him information concerning the above; and regrets that space has only allowed him in some cases to give a few lines to experiments of great interest which should otherwise have received a longer notice.

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INTRODUCTION

At the present time no cry is more popular than "Back to the Land"; it is taken up on all sides. The Socialist who looks forward to the breaking up of the estates of the landed proprietor; the Social Reformer who turns to the land as being the one source from which profitable employment may be obtained for the many thousands now in want; the Radical working-man of the city and town who regards a rural life as being an exceedingly easy and profitable means of livelihood; and the self-constituted but ill-informed friends of the agricultural labourer, all join in the cry.

It is not, therefore, surprising to find that Parliament during the session of 1892 passed two Acts directly dealing with this question. These are the "Small Holdings Act," to facilitate the acquirement of small holdings in the home country, and the "British Columbia Loan Act," sanctioning a substantial loan to a Colonial Government to assist colonization abroad. Now that the question has come within the range of practical politics, it seems absolutely necessary that the scheme of placing large numbers upon the land should be considered in all its details, so that an opinion may be correctly formed as to the extent to which a livelihood drawn from the land is practically possible.

Many have written upon this subject, but unfortunately almost every publication appears rather to be the argument of a partisan than a statement based upon the results of practical experience. One writer, for instance, shows how, by rearing pigs, a profit of £15 per acre can readily be made, but forgets the important item of food. In various estimates published as to the profit from cows and pigs to be kept on small farms, no allowance has been made for insurance against possible losses from death, nor has any interest been charged on the cost of the necessary buildings. Some writers suggest a system of growing produce and selling the whole, regardless of the expenses and risks of marketing in small quantities, and the heavy cost of manure which would be a necessity for such a system. Under some such serious errors as these it has been possible to show peculiarly attractive, though unsound, balance sheets of the results to be obtained from the cultivation of a small area of land.

Some persons have ventured upon a trial of some one or other of the systems suggested, and then finding the results different from what they had been led to expect, have thrown up their holdings after losing time, labour, and money.

It has been always easy for a practical and experienced man to show that it is impossible to gain such results as have been suggested in these misleading balance sheets, but there is a dislike on the part of a practical agriculturist to engage in the discussion of the details of such a question. The reason for this is, that if he, by facts and figures, shows that the results which are suggested by enthusiasts are really unobtainable, he is regarded by them as an enemy to the cause in which they take so much interest; while, on the

other hand, if he supports, to any extent, the view that a man can maintain himself and his family from land cultivated by his own labour, he is liable to be looked upon by practical men as having joined the body of unpractical enthusiasts.

The writer is not only practically concerned in farming large areas, but has given much attention during the past few years to colonization and to the small holdings question ; has had opportunities of observing the details of the subject both in this country and abroad ; and has been brought much in contact with the rural labourer and the unemployed class. He therefore publishes the results of his experience, with certain suggestions and criticisms.

BACK TO THE LAND

CHAPTER I.

RECENT SUGGESTIONS.

IN considering the question whether self-supporting employment upon the land can be found for those unskilled in agricultural work, it is desirable, in the first instance, to notice the various suggestions which have been made in relation to the matter.

National ownership of land.—It is claimed by many that a larger number of persons than at present cannot be employed in maintaining themselves upon the soil, until some measures be taken which will terminate private ownership of land. Whether or not the soil of this country was once public or communal property is immaterial when discussing the question of the formation of an immediately practical scheme for placing men upon the land.

In whatever manner our present system of tenure of land arose, it must be admitted that the soil now belongs to owners who either have invested their savings in the purchase of land because it was at the time the most secure available investment, or have come into possession of it through their predecessors who on some occasion made a

like investment. When this fact is remembered, it must be conceded that the Legislature would never pass a measure enabling the State to acquire the land without paying compensation to the present owners. This compensation would have to be either the capital value of the property, raised by the issue of a national loan, or an annual sum paid in the nature of interest upon the capital value of the property. If the former plan were adopted, the State would have to pay $2\frac{3}{4}$ per cent. interest to the bondholders upon the amount obtained ; if the latter, the interest to present land-owners would amount to a similar sum. The State would then be in possession of the land, and receive the rents in order to meet these payments.

Would this be beneficial to the cultivators of the soil ? As to the question of rent, in those cases in which the tenants are paying more than 3 per cent. on the value of the property, they might obtain some reduction, but this circumstance would only apply to a small proportion of tenancies. In the case of the majority of our large landed estates the nett rent is not more than about 2 per cent. upon the value, while if the amount expended during the past twenty years in permanent improvements be taken into consideration, cases are not rare where the income does not much exceed 1 per cent. It will therefore be seen that the State could make but little reduction in rents.

Then competition to obtain land near towns would arise ; and this land would have to be offered by auction. Many persons who express themselves anxious to farm, and think they are able to do so, but who really have neither skill nor sufficient capital, would compete for these lands, and rents would be forced up to far more than an experienced tenant would pay. As no Government could give the

attention necessary to ensure the competency of tenants, the results would be unsatisfactory to the State, to the new tenants, and to the land.

Then again, State ownership would not allow of that latitude in the payment of rent which in unfavourable seasons has in many cases saved tenants from ruin. It is true, that some arrangement might be made by which, through the creation of a sinking fund, or the payment of at least a part of the compensation money in the nature of a terminable annuity, the amount payable to the State at the end of two or three generations might be reduced to a comparatively small rent-charge; but even if this were so, it certainly is not a practical means of getting more people on the land at the present time. Moreover, State ownership even on these terms might not be favourable to the cultivator; for there would apparently be no means of obtaining such sums as are spent by landowners, and which have done so much in the past to improve the productive nature of the soil. If money were lent by the State for the purpose of carrying out landed improvements on interest being paid, in another two or three generations the interest on the amounts so expended would in some cases amount to as much as the present rental.

Then what would happen with the land which no tenant could be found to take? Many public bodies owning land at the present time have been put in most serious difficulties through their land being unlet in spite of all possible inducements being offered to competent persons to farm it. How much more serious would it be for the State to be similarly situated!

In our colonies a large proportion of the uncultivated land does belong to the Government; but it is not found

practicable to develop or work it, and so the Government sells or grants the land to individuals who have the ability and money necessary to use it. The value of land in such countries at a future date ought to be the present value, with the addition of the amount which has been expended upon it by the individual owner. Such, however, is not the case. In many new countries much of the land is not worth the amount that has been spent upon it; while some areas, by the creation of centres of population in the neighbourhood, become worth a very much larger sum, and secure a fortune to the individual owner. Exactly the same result would follow in this country, if the land were acquired by the nation, and then re-granted to the individual, on terms which would render it desirable for the latter to spend capital upon it.

The Land Restoration League advocates the acquirement of the land, by means of an increasing Land Tax, the object of the League being defined as "Taxation upon land values until the whole annual value of the land is taken in taxation for public purposes." It is suggested that owners at first might pay one-fifth the value, to be increased at long intervals. This can no more benefit the cultivator than if the State entered into possession of the rents. Some suggest that the State, having at least partially acquired the ownership, every man should have a right to use an area on paying a fair proportion of the tax. This scheme would not be feasible. The variations as to access and quality, the difficulty of working land by those who have neither skill nor capital, the impossibility of securing a suitable area and buildings for all applicants, and the necessity which would exist for the division of the land among our increasing population, are some of the reasons which make the

division of the land among our people an impracticable proposal.

Industrial villages.—A plan for bringing people back to the land was suggested by the Rev. Herbert Mills, M.A., in his book entitled *Poverty and the State*. The general object advocated therein has lately been stated by Mr. Mills as follows :—

“The principle involved in home colonization is that the market for human labour regulated by the demands of commerce and modified by the introduction of labour-saving machines is hopelessly unable to offer work to every one. The commercial method of production means that articles shall only be made for sale ; while the unemployed, from lack of work and lack of wages, cannot become purchasers. With a market over-stocked with food and clothing, manufactured for sale, multitudes are ragged and hungry, seeking work with despairing skill, accepting charity unwillingly, and with a sense of shame. Such persons ought to be enabled to work in self-supporting, self-contained villages : where production should be carried on for the use of the workers, and not for sale in the over-supplied competitive markets.”

This last proposition is so good that the details suggested for putting the same into effect are worthy of close attention, in order to ascertain whether they are practically possible. On turning to the chapter in *Poverty and the State* giving these details, one experiences great disappointment. It is there suggested that the object can be achieved by 2000 acres being made to yield sufficient produce for the maintenance of 4000 people. If such a proposition had been feasible there would probably, before this time, have been successful communities of this character in various parts of

the country. Unfortunately, however, practical consideration of the details shows that such a community would be impossible. Three important mistakes are made. In the first place the ordinary expenses of farming are overlooked, and the gross produce estimated without any sufficient allowance for expenses, which, in the case of an ordinary arable farm, could not be less than £4 to £5 per acre. Although such a community as that which is suggested would be free of rent, and hand labour would be done by the members forming it, still there ought to be a substantial deduction from the gross proceeds on account of the incidental expenses of farming. Then, secondly, the area allowed for the maintenance of the live stock is obviously insufficient, and under no system could the number included in the estimate be maintained on the acreage allowed for that purpose. In the third place, the yield both from the land and from the live stock is calculated at far more than could be secured. To give only one instance of this last error, the yield of milk from each cow is estimated at nearly 2500 gallons per annum, which is more than three times the average yield from the best cows specially fed to ensure the largest possible production. There being such serious mistakes affecting the very basis of the establishment of the community, it will be useless to give consideration to the details given as to the trades and occupations founded upon that basis.

Again, there would be insuperable difficulties in the management of the labour of such a property for the reasons considered on pages 116 to 120, when treating of Communal farming. The fact that skill is required before any man can work upon the land is entirely overlooked. For these reasons the proposals made in *Poverty and the State* must be considered impracticable. The Home Colonization

Society, which was started for carrying out these proposals, has, however, commenced work on a different and practical basis, as will be mentioned in the next chapter.

Peasant proprietorship.—It will be agreed by all who have given attention to the subject that the experience of those countries where the system of peasant proprietorship is in force, shows that under certain circumstances a living can be obtained from a small area of land. Because, however, small holdings are frequent and successful in those countries in which the system of small ownership has been the growth of generations, it does not follow that it is possible to introduce at once a similar system in this country, or, even if possible, that it would be a desirable course to take.

At the present time there are capable cultivators who are prepared to live upon small holdings, but who have no capital, thus being unable to farm independently. These, therefore, in any case could not become proprietors of land. Those who have the necessary skill and inclination to farm, and who also possess sufficient capital, are already generally farming the largest area which their money will allow them to profitably work as tenants. The capital necessary for even the smallest class of peasant proprietors working an area by hand husbandry only, is considerable. An estimate of the amount can readily be made. The cost of the land would not be less than £200. The erection of a cottage with three bedrooms; the building of cow-house and sheds; and the laying out of garden, with fencing, etc., to fit the property for use as an independent farm, would cost at least £150, even if much of the work were done by the intending cultivator himself. Adding to these two sums the amount of farming capital necessary, it will be seen that for any one to take

the position of a peasant proprietor, even on the smallest scale, must mean the investment of over £400, and probably nearer £500. It will be admitted that no skilled agriculturist possessing this sum would think of becoming proprietor of such a holding in preference to working a farm as a tenant.

No doubt a great part of the purchase-money could be borrowed, but even in that case the position of any cultivator as a small owner would not be so satisfactory as that of a tenant. Small owners have the same difficulties to contend with as tenants, but frequently they have utilized the whole of their capital by purchasing as large a property as possible without providing a sufficient amount to work the land in an efficient manner. An unfavourable season is then more likely to place the small owner in difficulties than if he were a tenant with a considerate landlord; for mortgagees do not give that time for payment of interest which owners are willing to do in the case of rent. Almost invariably it will be noticed that the farm buildings upon any small freehold are wanting repairs, and are sometimes in a ruinous condition, while permanent improvements, such as land drainage, which a landowner is sometimes willing to do for a tenant, are seldom undertaken. If an occupying tenant has sufficient money to purchase his farm, then there is good reason why he should do this, provided he is satisfied with a return of about 3 per cent. on his surplus capital.

To suggest, however, that those not now making a living from the land can be best assisted to do so by being helped to become owners, is ignoring the advantage to the cultivator of the present division of interests between landlord and tenant. This division means that the landowner provides the whole of the money necessary for the land and build-

ings, the tenant only finding the working capital, representing a comparatively small proportion of the total amount invested in the farm. The landowner is satisfied with 3 per cent. interest, or less, on his capital outlay, while the tenant can usually use such capital as he may possess in a more profitable way, and so as to be more readily realizable if wanted for any other purpose. For these reasons it would appear that, if a larger number are to be assisted to obtain a maintenance from the land, it should be as tenants rather than as owners. Fixity of tenure, freedom of cultivation, and compensation for permanent improvements must be secured : but under present conditions of farming to do this is not a difficult matter.

When these views are appreciated it will be seen that the "Small Holdings Act, 1892," will be of little service in establishing men upon the land. No doubt its provisions may be useful for many of those who wish to purchase properties for residence, and to work the same as a recreation, and who have some other substantial source of income. The money obtained under the Act will be slightly lower in interest than it would be from a private mortgage ; the proportion possible to obtain in relation to the value of the holding will be larger ; and the repayment of part of the amount by a terminating rent-charge is a useful stipulation. No one, however, could avail himself of the Act even for so small a property as just named, if he possessed less than £200. To find this sum among those who for the sake of maintenance are willing to take the hard work and risks of an actual cultivator would be unlikely ; while even if the man were found who had this sum, it would be undesirable, for the reasons already given, for him to attempt to commence work as an owner before he

had experience as a tenant. For these reasons, therefore, we must come to the conclusion that the Small Holdings Act cannot be largely utilized by those whom it was intended to benefit, and that it is not practicable for any large number of labourers to be established on land by availing themselves of its operations. The Local Government Bill of 1893, if it become law, may be of assistance in extending the benefits of the Act by making tenancy under it more practicable. This bill will be found noticed on page 35.

A new organization which has been suggested to be formed with the name of The Lands Allotment Association, may be able to do something, for it is intended not only to provide for lending to intending cultivators the balance of the purchase-money of the properties, the greater part of which they will be able to borrow under the Small Holdings Act, but also for lending them a sum up to one-half the necessary working capital. This proposed Association is not yet in a sufficiently definite form to judge of its practicability on a large scale. There appears to be considerable risk in lending capital to independent owners, having regard to the difficulty of keeping such control over them as will provide security for the sum lent.

Although on the economic grounds which have been named, ownership seems neither a necessity nor an advantage to a small cultivator, it must be admitted that from Social and National aspects the creation of a large number of small owners would be most desirable. Many who would wish to obtain their maintenance from the land have strong feelings on the subject of right of the ownership of the property upon which they expend labour and money. Some of these would like to own their land even if it did tie up their limited capital; somewhat reduce their income;

and place them under liabilities to mortgagees. Again, arrangements for purchasing small areas may assist a larger number to obtain land in consequence of the adoption of this method enabling them to raise capital for the erection of the buildings when the original landowner is not willing to do so. Some propose that an intending cultivator might acquire land in this way, and commence farming with a few sheds, providing himself with lodging elsewhere. Then gradually perhaps in the course of years, and mainly by his own labour, he would improve the property, and erect a suitable residence and buildings. To take this course a purchaser must possess not less than £200, and this sum would only be sufficient, if he could avail himself to the fullest possible extent of the assistance provided under the Small Holdings Act, or from some private source to a similar extent.

It would appear, however, that the introduction of a system of perpetual leasing, which would be somewhat similar to the Scottish "feu" system, would give all the advantages of peasant proprietorship without the occupier having to invest large capital. Though this system could be applied to any small area where the leaseholder was prepared to erect the requisite buildings, the system is more adaptable to dealing with waste or uncultivated land, as named on page 200.

Independent small farms.—We will now consider the views of those who are of opinion that any man renting a few acres of land can obtain maintenance therefrom for himself and family. Some who have not given detailed consideration to this question, or who possess no practical knowledge of the subject, have committed themselves to definite ideas. Certain writers have claimed that a man only wants three acres and a cow to ensure a comfortable

livelihood ; others again have said two acres were sufficient if used for gardening ; while a considerable number state that a small holder has only to confine himself to rearing pigs in order to obtain a profitable living. If such propositions were practicable, the problem of getting a living from the land might be considered to be solved. Unfortunately, results have shown that, with the existing conditions of agriculture, it is impossible for any man under ordinary circumstances to obtain his maintenance solely from a small holding when it is isolated and independent. If the life of a small holder were so easy, as certain unpractical writers wish us to believe, we should see some indications of a general wish on the part of labourers who already possess the necessary experience, to become small holders, in order to escape from their work of grinding toil for the benefit of another. No such wish is shown. An opportunity of renting a piece of grass land involving no labour is generally eagerly sought by a labourer as an auxiliary means of income. He also frequently is prepared to take a small allotment, if he have not a sufficiently large garden to grow the produce needed for consumption by his family. But to have some small area as a subsidiary means of income is very different from giving up the position of a wage-earner, and relying solely upon the produce from land. As no general desire to take this step is shown by those agricultural labourers who would be expected to be most anxious to gain the independence it would give them, it is evident that this class, who alone have the necessary experience to judge upon this point, do recognize the difficulties and uncertainties of the life of a small holder under ordinary conditions.

It may, however, be contended that the agricultural

labourer by his training is lacking in enterprise, and that an artisan or intelligent town labourer coming fresh to the work would be able to do better. This might apply to a piece of grass land or a small allotment, which to a town workman would form a pleasant and healthful change of employment. When it is a question of obtaining a maintenance solely from land it becomes a different question, for not only experience but various other conditions are then requisite.

In the first place, the provision of suitable land owned by a capitalist who will provide all the necessary buildings, is a necessity. Suitable land can be found on easy terms in many districts, but seldom combined with the capitalist who will provide the buildings. There are few landowners who have the power to spend the amount necessary for the erection of the buildings, even though they favour the extension of small holdings. Especially is this the case in consequence of the possible difficulty which may be experienced in obtaining and keeping reliable and satisfactory tenants at such rents as would pay some interest on the expenditure made. Then skill is a necessity, for no tenant can keep a cow, pigs, or poultry without experience of their wants and habits, and a knowledge of how to grow the crops needed for their consumption in the most economical manner. The possession of capital is another essential, for even if the landlord provided all the necessary buildings, the tenant could not work even five acres without at least £60 for the purchase of farm stock, tools, manure, seeds, &c., and for the provision of maintenance for his family until realization of produce. If the tenant possessed the requisite skill and money, his next difficulty would be to effect the sale of produce. Evidently the best policy of farming for such a tenant would be for him to grow as much as possible of the

food required for home consumption. In addition to raising this produce, he must also be able to grow sufficient to realize the cash necessary to pay the rent, rates, and general farm expenses; to buy such food as could not be home grown; to purchase clothes, and to provide the general incidental expenses. It would probably be necessary to sell produce to the value of twice as much as was grown for consumption in order to meet these payments. To do this the small holder would have to convert his produce into a portable, and, as far as possible, a non-perishable commodity, which involves skilled labour with uncertainty in the quality of the product. There is then loss of time in marketing and cost of carriage, while in the absence of a private customer the producer has to accept for his products whatever price a local dealer thinks proper to give.

If a small tenant had overcome all these difficulties, that is to say had secured suitable land and buildings, possessed the necessary skill and capital, had a wife or other assistant competent in marketing, who could make butter and bacon of a reliable quality, and lastly, had found a certain market for his produce at full prices, then success might be obtained. Without these conditions, which are not now attainable under ordinary circumstances, it is only possible to come to the conclusion that the general extension of independent small holdings as a sole means of livelihood is impracticable.

But is there any method by which these conditions can be supplied? If so, it is evident that by the introduction of this method small holdings will become practicable, and at least this way found as one means of getting people back to the land. Any method suggested for supplying these conditions must be one which will give to men the

necessary experience without expense, test their competency, secure for them suitable land and buildings, lend them some part of the necessary capital, provide them with such assistance that they may produce articles of good quality at the smallest possible cost, and lastly obtain for that produce a certainty of realization.

If a scheme effecting these objects can be devised, the question how to get men back to the land will be partially solved. Such a scheme will hereafter be suggested, but before giving consideration to the same it is desirable to notice the various actual attempts that have been made in the settlement of men upon the land, and the experience to be gained therefrom. This is the subject of the two next chapters.

CHAPTER II.

RESULTS OF ORGANIZED EFFORTS.

HAVING in our first chapter considered various suggestions, it is desirable now to review the results of efforts at the employment of unskilled men on the land which are already in operation.

Settlement at Frederiksoord.—This settlement is the result of the earliest effort of the kind, and originated with a general of the Dutch army, who, seeing that many men, disbanded at the peace of 1815, were unable to obtain work, formed the idea that they could get their living from the land. To try this experiment, a large uncultivated area was obtained on the borders of Friesland, situated near the small town of Steenwyck. A Settlement was here formed known as Frederiksoord, and at the present time it consists of six farms of over 200 acres each, worked by the society owning the settlement, and about 220 farms of an area of $7\frac{1}{2}$ acres each, worked by independent tenants. The history and work of the Settlement have lately been described in a small volume written by Mr. H. G. Willink entitled, *The Dutch Home Labour Colonies*, published in 1889, and in an article by Mr. Ernest Clarke in the Journal of the Royal Agricultural Society for December 1891.¹ With two so

¹ An extract from this article describing the colony will be found in the Appendix on page 205.

recent and easily accessible accounts it is unnecessary here to notice in detail the present arrangements of the settlement. The writer has visited the farms, and, as a result of his investigations, it seems that the condition of the tenants is not so satisfactory as at first appeared to be the case. All the tenants receive special assistance from the Society; several even with this help admitted they could not make a sufficient maintenance without taking outside work; and many were considerably in arrear with their rent. The standard of living and the wages given for agricultural work are very low in the district of the Settlement, the farm labourers seldom obtaining more than 1s. 2d. per day. An income from a small holding which would be considered satisfactory in comparison with such a daily wage, would be looked upon as a starvation allowance by an English labourer able to earn twice that amount.

As to the results to the Society owning the Settlement, they seem to have been satisfactory when the work was first started. The Society, however, very soon undertook from the Government the maintenance on other properties of a large number of paupers, and within ten years from the commencement had nearly 5000 persons upon land under its control. Under many difficulties the work went on till 1859, when the Government granted over £450,000 to relieve the Society from its liabilities, and took these other properties, known as the Beggar Colonies, under its own control. In consequence of the connection of Frederiksoord with the Beggar Colonies in its early history it is difficult to say what has been the actual cost of the Settlement, but the founding of each household is estimated by the Society to cost about £140. As to the revenue, the rents receivable from the small farms are over £1500 a year, and this, supplemented

by charitable contributions of £1200 a year with a profit from the general farms, is sufficient to meet the general administration expenses. These include the expenses of education, the technical training of the children, and medical advice, but no interest on capital. The fact that the Settlement is not self-supporting is, in the opinion of the writer, mainly owing to the unsuitable situation and poor soil.

Any man coming upon the Settlement has to be nominated by subscribers to the Society owning the property, and approved by the director. He is then received as a labourer upon one of the model farms worked by the Society, and after residence there for not less than two years, and in many cases for more than double that time, he is admitted to an independent holding, and live stock is supplied to him. When once thus established the tenant usually remains for life, and there are seldom more than four or five vacancies for new tenants upon the Settlement in any year.

So far as the writer has been able to ascertain, Frederiksoord is the only organized attempt in Europe to enable men to secure a permanent living from independent holdings situated upon one property, where they have the advantages of co-operation, and where means of industrial employment are provided.

Dutch penal colony at Veenhuizen. — The Beggar Colonies previously referred to, taken over by the Dutch Government in 1859, have now been concentrated in one settlement at Veenhuizen in North Holland. Any man found begging in Holland is brought before the magistrates, and on conviction is sentenced to a few days' imprisonment, to be succeeded by a term of from six months to two years of forced labour upon this colony. When the writer visited the colony it appeared that all the men were engaged during

favourable weather in the manual work of reclaiming and improving waste land. By this means large areas of what had been unproductive soil had been brought into a good condition of cultivation. During unfavourable weather the men were employed in various indoor industries.

As to the financial results, the farming and industries are both extremely well managed, and the returns are usually sufficient to provide for the maintenance of the men, but not to meet the costs of administration, which, as it is regarded as a penal colony, are naturally heavy. Any colony started on a similar basis, but for those who voluntarily offer to work in consequence of not being able to obtain other employment, would be likely to have more favourable results. The costs of administration of such a colony with the same number of men as at Veenhuizen would be less than half what is there expended. Then more value would be obtained from the work, partly because the men would be of a more honest class, and partly because the work being of a voluntary nature, more inducement could be offered to ensure its faithful execution.

Farm labour colonies in Germany.—We will now consider what has been done in Germany. In that country far more help is given to the unemployed than in England, and the system of Poor Law relief is one from which much could be learnt by certain of our Poor Law reformers. The only work which need be noticed here is that done by the Farm Labour Colonies, and upon the Municipal Farms near Berlin. The former originated with Pastor von Bodelschwingh, who told me, in an interview I had the pleasure of having with him, how he had recognized fifteen years ago that the relief the unemployed wanted was work and not money, and he had gone to the land as, in his opinion, being

the only means of providing that work. The first colony was started near Bielefeld in 1882. It is unnecessary for me to give any description of the method and organization of the work, for it is fully described in the *Nineteenth Century* of January 1891, in an article by Lord Meath,¹ and there have also been references to the work in other journals.

As to the financial results, the cost per man is about 6*d.* per day in excess of the profit from the farm. This amount is mainly contributed from charitable funds, but aid is also given from Imperial resources and local taxation. Though there is this deficiency, it should be remembered that the improvement in the capital value of the land is not considered. Few productive indoor industries being in operation, a large amount of time must be wasted in unfavourable weather. The soil is not of that character which would give large yields or variety of produce, and the colony is not well situated for markets. If greater care were exercised in the management of manual labour, and more attention given to the work of each man, more favourable financial results could be obtained than at present, though under no conditions do I think the colony could be made self-supporting. The moral results have been considered so successful that twenty-one country colonies have been organized since the one at Bielefeld, some of which, I understand, are financially more satisfactory.

Hand-labour farms near Berlin.—References have frequently been made to the employment of large numbers of men in hand cultivation of farms near Berlin, worked by the municipality. Much information concerning these farms was courteously given me by the Chief of the Poor Law

¹ An extract from this article describing the colony will be found in the Appendix on pages 208 to 211.

Board of that city. In Berlin there are homes for the aged poor, while those men who are destitute, through being unable to find employment, can avail themselves of the free town shelters, which take the place of our casual wards. After any man has availed himself of the free shelters for a few nights without obtaining employment, he is sent for a definite term to the workhouse. Of 1300 housed in this building at the time of my visit, nearly 900 were employed upon the farms situate about eight miles from the city.

As a result of a day spent upon these farms, I formed the opinion that the work was not arranged in such a manner as would economically utilize the whole power of the men. Far too large a number were employed to produce certain results, and the expense of administration was out of all proportion to the value of the work obtained. Although the system adopted is the simplest for the employment of men on the land, and one that some might declare could be profitably applied, it certainly could never be made self-supporting. The comparatively small area that was devoted to gardening was very satisfactorily cultivated. It must be remembered that on such a property as this there are great difficulties. The number of men is constantly varying; the workhouse is situated some miles from the farms; the labour available is of the most ineffective kind; and the work is regarded more as prison labour is regarded by us, viz. as a means of employment, rather than as an attempt to give self-supporting labour to the men maintained. From the official annual report to March 31, 1890, it appears that the cost of maintenance of each man was $2\frac{1}{2}$ d. per day in excess of the estimated value of his labour. The costs of administration were nearly as much as the expenses of main-

tenance, the total cost for each man being rather over £11 for the entire year.

Having thus glanced at what has been done in the employment of the destitute class on the land abroad, we will now notice the results which have been achieved at the few attempts already made in England.

Convict labour on land at Dartmoor.—The earliest of these attempts was the employment of the forced labour of convicts at Dartmoor. A large extent of rough, desolate moorland was here in possession of the Government. Since the convict prison was established, nearly 1000 acres have been reclaimed solely by convict labour, the greater part under the direction of Mr. Alexander Watt, F.S.I., to whom I am indebted for much information as to the work, given me during my inspection of the farms. The results amply show what can be done in rough improvement work by careful management of untrained labour. Unfortunately the position is so bleak and exposed that it is unusual for corn to ripen. The land, therefore, when brought into cultivation is mainly sown down to grass, and used for stock-raising. The quality of the land when reclaimed being so unfavourable, the improvement work carried out would not have been profitable for a private owner, even if the labour had been available at nothing beyond the cost of the maintenance of the men.

Settlement of the Home Colonization Society.—Probably in consequence of the unpractical nature of the proposals made in *Poverty and the State*, named in the last chapter, it has been found difficult to get sufficient money to attempt a trial of the principles of the Home Colonization Society. In May 1892, however, work was commenced on a small, but more practical, basis than is advocated in Mr. Mill's

book. In that month possession was obtained of a water-mill and some cottages in Westmoreland with eight acres of land. In the following October further land was acquired, making a total area of under 150 acres, and upon this an industrial and farming community is being established. The total capital involved is nearly £5000, and when the writer was upon the property in the autumn of 1892, he formed the opinion that the land alone would maintain 20 to 30 workers, exclusive of profit from industries.

In March 1893 there were 30 colonists on the property, 22 being adults. As the land has been in the possession of the Society for so short a time, no definite opinion can yet be expressed as to the success of this particular scheme, or as to the actual financial position.

The Hadleigh Colony of the Salvation Army.—The only other work now in operation in England with the view of finding self-supporting work upon the land is the Hadleigh Farm Colony of the Salvation Army. The results obtained there must be considered in some detail, for the organizers of the scheme had the benefit of the experience gained from all the work previously mentioned, and not being pledged to any particular system, were free to adopt whatever basis was considered best to achieve the object of finding self-supporting work upon the land for the destitute and unemployed class. The best results were therefore to be anticipated. Some of the possible ideas for the suggested work named in *Darkest England* were on detailed consideration abandoned; and before the acquirement of the property, the definite objects to be achieved were settled. The Review of the first year's Social Work of the Salvation Army, issued in December 1891, states these to be—

1. To find work in the reclamation or improvement of

land upon which unskilled labour can be profitably employed, and of such a character as will form a good test whether "out of works" are willing to work or not, and so prove whether they are worthy of future assistance.

2. To cultivate land under the ordinary methods of farming, but employing hand labour to the largest possible profitable extent, so as to afford useful training for those who wish to become emigrants or established as cultivators of small allotment farms in this country.
3. To carry on such industries as are connected with farming, as well as to carry on various branches of general industrial work, which will give profitable employment for unskilled workers under better and more healthy conditions than exist in London.
4. To provide means for training men in useful trades or industries, giving them opportunity of moral improvement, and assisting them in educational or other ways, so that they may be better able to get their living in the future.

The special advantages of the farms at Hadleigh for the attainment of these complex objects have been generally agreed upon by all critics, and were specially noticed in the report of the Committee of Inquiry issued in December 1892. The colony has been described in various publications, and I do not, therefore, propose to mention the method of work, but only to refer to the results shown by the published statements which have been made.¹ When entering into possession of the property it was pointed out that in comparison with an ordinary farm the colony would

¹ A short extract from a description of the colony will be found in the Appendix on page 212.

have special advantages. There would be no rent or interest on capital to be provided ; sufficient capital would be available for working purposes ; extra labour was obtainable whenever wanted at harvest and haytime at a cheap rate ; a market at full wholesale prices for many products was secured in connection with the various branches of work carried on by the Salvation Army ; extra returns from garden produce would be realized without the usual risks of a market gardener, by reason of the consumers being upon the property ; and better prices in some cases obtained by sale of manufactured articles in the place of raw products.

The first report and balance sheet covers the period from the commencement of the work in May, to November 30, 1891. Referring to the financial statements contained therein, it appears that the farm (excluding the poultry) returned a profit of £42 after meeting all farm expenses, but not charging general colony administration. Among the expenses was the valuation on entry, this including, in accordance with the ordinary custom, the rent, rates, and tithe on the arable land from the previous Michaelmas, and the cost of cultivations of the growing crops. In this particular case such arrangement was unfavourable, as the farm was in a poor and foul condition, and some of the wheat upon which the heaviest valuation must have been paid proved valueless, and was ploughed before harvest. Taking into consideration this valuation, the condition of the land on taking possession, the difficulties of organizing the labour, and the expense of starting any new work, the result above-named must be considered satisfactory. The loss on the poultry department of over £160 was the most startling fact in the balance sheet. This department, it appears, was in charge of a special manager, who claimed to have made substantial

profits on a poultry farm of his own, and had volunteered to do the same for the Army. His failure during this first year was owing to not having proper arrangements ; unexpected death of stock ; and other accidents, incidental to work at a new place.

From the report, for which I was partly responsible, having been concerned in the early organization of the colony, it would appear that the labour of those engaged on excavation and land reclamation was satisfactory. It is stated that this class of work was being executed by the men at substantially less cost than if it had been done by paid labour on ordinary terms. The results shown from the labour of those men who had been employed in gardening were also decidedly encouraging. It was further stated that the men proved of good conduct, easy of control, and willing to work. Lastly, it was said that the men were of a most dependent character when coming upon the colony, and in order to improve them in this respect, a course of special training for those who wished to become emigrants was being settled, and complete technical training had been arranged in various indoor industries.

The organization of suitable industries to occupy spare time, and also for the employment of those who were not fitted for outdoor labour, had proved most difficult. These industries had to be of a character which required but little capital ; could be carried on by intermittent labour ; would utilize the full value of any experienced man on the colony ; and would give a return of not less than 1s. 6d. per day for practically unskilled men. Then the products had to be of such a nature as were required on the colony or by some of the other branches of the army work ; or of a class not now made in this country ; or of a character for

which the demand exceeded the existing supply. Unless these conditions were complied with, it would be seen that the work on the colony might tend to increase the unemployed class. The difficulties of finding the industries and arranging for instruction in them was at length surmounted. Such were the results attained up to the issue of the first report.

The further progress of the work is shown by the report and balance sheet up to September 30, 1892, issued by the Committee of Inquiry. Turning first to the working account of the farm, the result is decidedly disappointing, for on the whole period since commencement there is a loss shown of £1590. As the first balance sheet had shown a small profit, the loss for the last year was somewhat greater than the sum last mentioned. This result is without charging rent, tithe, rates (except such part as was charged in the valuation on entry), interest on capital, or administration expenses. The first reason apparent for the disappointing results is the low price of all farm produce, for which full effect had to be given in the farm valuation on September 30, 1892. On inspection of the working account, a second cause will be at once apparent, for to any one acquainted with the cultivation of a farm it will be seen that the ordinary working expenses were excessive, and that, at least, the same return ought to have been made without the item of £1145, entered as the maintenance of colonists. It is evident that upon the engagement of each colonist on farm work, either horse labour or paid manual labour should be correspondingly reduced. This, however, necessitates great skill, trouble, and special powers of management on the part of the farm superintendent. Unless these be exercised, the farming is allowed to continue upon

the ordinary basis of horse husbandry, and the unskilled men only employed on non-essential work, of which there is always a great variety upon any large landed property. Such was evidently the case upon the colony last year, nor can this be altogether unexpected, as the same error is made, to some extent, in the German colonies. The first farm superintendent at Hadleigh had shown special appreciation of the necessity for the most careful administration of hand labour, but, unfortunately, he died in December 1891. From the financial results, it is apparent that his successor could not at once devise plans for the management of the work of the unskilled men on the land. Little hand-culture seems therefore to have been employed, except in gardening operations, which were in charge of a specially skilled superintendent, and have proved satisfactory. The third cause for the poor results was that no substantial addition to the area under cultivation was made; though had circumstances rendered it possible to give attention to this profitable work, at least 120 acres of the rough land should have been under cultivation without any larger expenditure than that which has been incurred. Another cause of the diminished farm returns was the planting of forty acres of fruit. The actual cost of this work is charged to capital account; and though possibly a desirable expenditure, it prevents any appreciable return for the first year or two, from the area so planted, which appears to include all the best cultivated land.

But the cause which must have made the most substantial difference in the revenue is the non-development of the minor industries, for it appears that there has practically been no income from this source. It must be remembered that there is darkness during working hours each day, for

many months in the year ; there will probably be some weeks of frost ; and many days of continuous rain, during the whole of which time work on the land is impossible. At any time of the year there are certain to be periods when field-work is not a necessity even if the weather be favourable. Then there were also many men upon the colony who were physically unfit for outdoor labour. It was in consequence of these circumstances that so much prominence was given to industries in the objects before stated and settled before the commencement of the work ; and so much care given to the arrangement of technical training named in the first report. On every man adopting some industry the system of paying cash grants, in addition to the provision of maintenance, might possibly have been stopped, the men being left to earn what they required for themselves from their industrial work. This for the period covered by the report, might have made a difference of nearly £3000. Even, however, if no important alteration had been made in this direction, there can be no doubt that with reasonable care each man, during the time when his labour could not be profitably utilized in outdoor work, could have made an average return of 2s. per week in addition to receiving training which might have been useful to him in the future. A return at the rate last mentioned calculated on the number of men kept from December 1891 to the date of the report, would have exceeded £1200.

In case it may be thought that the poor results from the sources of revenue named have been owing to oversight or neglect, I should point out that it was evidently considered the best course to develop on a large scale certain manufactures involving large capital outlay. In the expenditure

of this capital the labour of the colonists has been largely used, the necessary result being the postponement of the development of the landed resources and non-introduction of productive industries. By comparison of the balance sheets of November 30, 1891, and September 30, 1892, it appears that over £18,000 were spent in permanent works during that period of ten months.¹ Some are of opinion that the greater part of this expenditure being upon a wharf, railway, and brickworks, was not of a character likely to achieve the objects of the colony. The Committee of Inquiry considered it was too early to express an opinion as to the ultimate success of what has been undertaken in this direction. If the amount absorbed does not prevent the completion of the objects of the colony, and returns in the future a profit of perhaps £2000 a year, many will consider the wisdom of this expenditure has been shown.

Can the colony be made self-supporting? This should be considered, for, if with all the special advantages it possesses, men unskilled in agricultural work cannot there be maintained from the product of their labour upon the land, it must be admitted that no means could be devised by which such a result could be accomplished elsewhere. As we have seen, the loss for the year proved to be over £1600. In addition to making up this amount, before the possibility of maintaining as many men as have been kept on the colony can be shown, there must be a sufficient surplus to provide interest on capital; to pay tithe and rates, which together amount to about £1600 a year; and to pay general administration expenses. These together make a total of about £4000. Can this revenue be made

¹ The amount and details of the total expenditure upon the Hadleigh farm colony will be found in the Appendix on page 214.

from the colony without increase of expenses? This I believe to be possible. The capital expenditure on matters not affecting the land being now completed, attention will be able to be given to the profitable improvement of the land, and raising therefrom the maximum amount of produce. If then the horse labour be economized, and the men more largely employed on hand cultivation of those crops which the special circumstances of the colony render most profitable; if the treatment or partial manufacture of the farm products be introduced in the place of their being sold in the raw state; and if minor productive industries be organized for the utilization of the weeks which must otherwise be spent in idleness; then it is possible to obtain the return named without an increase in the expenses.

It should not be overlooked that nearly 300 colonists have been maintained, which is far beyond what the produce of the land would support. In September 1891, when possession was obtained of the whole area of the colony, its extent was 1150 acres. Only 310 acres were then under tillage, the greater part of the remainder being rough land which had gone out of cultivation. In the present month (April 1893) the area under tillage, I am informed, is about 350 acres, in addition to fruit. On p. 80 it is shown that the average produce of three acres under hand husbandry is necessary to meet the total expenses of each man. The special advantages possessed by the Salvation Army will render a rather less area sufficient, if well organized, and probably the total expense of maintenance of 150 men can be paid out of the produce from the land as it now is. Any larger number can only be maintained by support of the charitable, or on profit from industries.

CHAPTER III.

ALLOTMENTS AND SMALL FARMS.

IN the last chapter reference has only been made to the results of various public colonies employing large numbers under direction, but we must now glance briefly at the experience to be gained from the results of the working of independent allotments and small farms.

Results from allotments.—Allotments are far more frequent than many suppose, and in accordance with the latest returns there are probably over half a million people in England cultivating areas of less than one acre. There is a great difference of opinion as to the actual results of working such areas. In some cases where the allotment system has been tried, allotment holders who have taken up their land with enthusiasm have discontinued it after having attempted the work for perhaps two or three years. In other parts allotments are so appreciated that there is a competition to secure any which happen to become vacant. The reason for this discrepancy of opinion can soon be ascertained.

Conditions which determine correct area of allotments.
—Under ordinary circumstances allotments will always be successful when two conditions are fulfilled. In the first place, the size of the allotment must be of that area which

the tenant holding the same can easily cultivate in his spare time with the assistance of his family; and secondly, the produce to be grown must be that which can be consumed by his household, or by pigs or other farm stock kept by him. The numerous cases of non-success of allotments have been owing to non-observance of these two conditions.

The first should determine the area which may be taken by any man. Thus an agricultural labourer can have but little spare time available. If in full employment, he has but few hours when his time is his own; and all who have given consideration to the subject will agree that the greater part of those hours could be better spent by him in rest rather than in continuation of toil of the same character as that in which he has been engaged all day. An active farm labourer may take an allotment of as much as one-eighth of an acre, but that is amply sufficient to raise all that his family can consume, and for him to take a larger quantity will mean failure, discontent, and loss. Working-men in our towns, and rural labourers are in a position to take a larger area. For these the working of the allotment may be a healthful and enjoyable change of occupation, and the time at their disposal will usually be longer than that of any farm labourer in full employment. Then again a village artisan or tradesman, with his time entirely his own, but with a trade possibly occupying only a portion of that time, will have ample opportunities, and can easily and profitably work a large-sized allotment. It may be considered that every acre of land if fully worked will require 320 hours of labour in the course of the year, in addition to the assistance of the family for lighter work. If every man will remember this, and will consider before taking land how much time he is likely to be able to spare during the hours when work

on the land is possible, we shall not see so many poorly cultivated allotments as are now frequently found.

If an intending tenant finds he will have sufficient time to justify his taking a large allotment, he must then give consideration to the second condition above-named. It is easy to show that large profits can be made from any area if the returns are estimated at the retail saleable price of the produce; but to obtain this amount is usually impossible. The produce of an allotment supplied to the family of the grower may be placed at the retail value in estimating the money return from the land; but those wants being supplied, the remainder of the produce under ordinary circumstances can only be considered to be of the value which it is worth for feeding pigs. Unless, therefore, the grower has the arrangements necessary for rearing the latter, and is prepared to do this work, his time may be wasted if given to raising more produce than required for consumption.

Returns from allotments.—If land is situated near a town, then the produce may sell at high prices, and under these special circumstances land could be worked by hired labour, both conditions above-named being then disregarded. As to the returns made from allotments, an area of about a quarter of an acre growing produce for home consumption may return a value of £3 to £4. Consideration of a large number of results seems to show that allotments exceeding that area, if skilfully worked in accordance with the conditions before-named, may be expected to return a profit at the rate of £8 per acre. If the hours of work are about as before-named, this would be a profit of £4 per acre, in addition to remuneration for labour at the agricultural rate of 3d. per hour.

Whether small holdings or any other means for making

more persons entirely dependent upon the land can be carried out in this country or not, the extension at least of allotments can be advocated provided only that the two conditions above-named be observed.

Local Government Bill, 1893.—The provisions of the Local Government Bill recently introduced, and which, having support from both sides of the House, will probably become law this year, give important powers to Parish Councils which are to be constituted in rural parishes. Included amongst them is power of management of allotments, and provisions which will render more effective the Allotments Act of 1887, and the Small Holdings Act of 1892. These provisions must be exercised with caution if they are to be carried out with success.

The condition under which small areas can be successfully worked have just been mentioned. There are many men who without consideration of those conditions think they would like an allotment. These men are mainly labourers who either have mistaken views as to their own ability to work, or have been persuaded that they should have land by those who think an allotment for every labourer is the one thing necessary to bring happiness to our villages. When this Bill becomes law, there will no doubt be a largely increased demand from such people, and there may be considerable pressure brought to bear upon the Parish Council to use such influence and powers as they possess, to supply allotments and small holdings to almost every applicant. If, however, the whole immediate demand be supplied without the most careful investigation as to the intentions and capability of each intending tenant, it is certain that in one or two years many of the tenants will find that they do not possess either the time, skill, or

inclination to do the continuous cultivation work which is necessary. The result will be, that many of the allotments will be given up, in some cases without payment of the rent due, and in a bad condition of cultivation. This has frequently happened in private cases; the most notable instance known to the writer being on an estate in Sussex. In this case allotments were provided for all applicants. Within two years more than half the tenants who had previously expressed so much anxiety to obtain the land, decided they would not work it any longer, it thus becoming untenanted. It is not unknown in the experience of those having the management of allotments for a tenant to take the land and then neither to dig nor to take any steps towards its cultivation.

In any case where the Act is brought into force it will be necessary to make inquiry as to the character and the amount of time which the applicant is likely to have free for working the land, before any decision can be arrived at as to securing him an allotment. If the applicant be approved, the terms of letting must be carefully arranged, and include rules necessary to secure good cultivation, and the payment of a deposit of a sufficient amount to cover possible loss if the land should come into possession, and be found not to have been worked in a proper manner.

Without some such care the new powers proposed to be given under the Act will be prejudicial. If, however, this caution be exercised, though the applicants under such conditions will be fewer in number, yet the Act will be useful in rendering a larger number more dependent upon the produce of our land.

Small holdings in England.—In referring to a small holder I refer to one who is entirely dependent upon the

produce of the land which he works, while an allotment I define as a small area of land worked by a cultivator who has some other substantial means of livelihood. In Chapter I. the reasons were given which usually render small holdings impracticable in England; but these are successful under certain conditions. In some of our dairy districts there are small holdings consisting mainly of grass land. About twenty acres of the latter, if skilfully managed and of good quality, will give a satisfactory living to a skilful tenant. Such grass land, however, must be of a quality which can only be produced after many years' growth, and for any such holdings which become vacant at the present day there are numbers of eager applicants. There are further small holdings situated in specially accessible positions for London or other large towns, and devoted to growing garden produce or fruit, their situation enabling a profitable sale to be secured for these products.

Small farms worked by horse labour.—There are also small farms worked by tenants employing horse labour either by contract or by joint share with other tenants; but if they are ordinary holdings of fifty acres or less of arable land, such attempts seldom give a satisfactory livelihood. Horse cultivation seems more effective, economical, and speedy than hand husbandry. It is necessary, however, to consider the difficulties of a small tenant in relation to horse labour, for we shall then see reasons why the area of the cultivatable portion of a small holding should not under ordinary conditions exceed that which can be worked by the hand labour of the occupant and his family.

In the first place, assuming that he has his own pair of horses, it would be possible for him to work effectively fifty acres of ordinary arable land. The cost of food, harness,

use of implements, stable expenses, and incidentals, not including depreciation in value of the horses, extra labour in attention to the same, or risk of death, would be not less than £80 per annum. These costs would amount to more for each horse than to a large farmer who kept several. To give a return of this sum, and 15s. to £1 per week for the labour of the tenant, it will be seen that a nett profit of £2 10s. per acre must be obtained from the area named after paying rent, tithe, rates, seed, manure, tradesmen's bills, and all incidental expenses of farming. In good seasons, with skill in management of farm stock consuming produce on farm, and under favourable conditions, this could be done. Unless, however, the tenant also held a substantial area of pasture of a productive character the results would be speculative. He is likely to attempt to economize by saving expenditure in manure, or obtaining inferior seeds, and in unfavourable seasons would have to live partially upon his diminishing capital, realizing the same either through loan offices or by a forced sale of products. The farm will thus be getting into poorer condition, until the time comes when, from the death of a horse, or a specially unfavourable season, he has to go to a neighbouring large farmer to relieve him of his responsibility as a tenant. This is the cause that is leading to the gradually decreasing number of small farmers except in special districts.

A tenant cultivating a small area with his own horses and labour may obtain somewhat larger returns than the large farmer in proportion to his area, in consequence of being able to give greater care to details, and more attention to the minor branches of farming. He would not, however, get that increased yield which hand cultivation would give, while in comparison with a large farmer he cannot manage

his horse labour as economically, has to pay retail prices for his commodities, is unable to wait for markets when he has to sell, and finds it difficult to obtain full prices for small quantities of produce, probably got together in inferior condition owing to want of sufficient assistance.

Some consider that the small farmer should work his land by horse labour, but hire horses and implements when he requires them, or share the use of same with neighbours. Those who have acquaintance with the actual conditions of farming can scarcely advocate this proposal. When the seasons come for agricultural work the owners of horses have too much work for them to allow their use to others until they have completed their own operations. The result of attempting to work a farm with hired horse labour must, therefore, be unsuccessful through being unable to get the horses when required. Joint ownership either of horses or implements would also be unsatisfactory for the same reason, and cause continuous disputes. In some few cases small tenants have made arrangements to give their labour to large farmers, in exchange for horse assistance from them. This, however, is not generally a successful arrangement.

Organized efforts to extend small holdings.—The Small Farm and Labourers' Land Company was formed in 1885, to assist those who wished to cultivate small areas, and the experience obtained by that Company supports the conclusions just named. It has purchased four estates, together of about 700 acres in extent. Each estate has been sold or let in portions, but the small holders thereon who are doing well seem to be those who have some trade or means of support apart from their farms. The dividends have not been sufficiently satisfactory to obtain any large financial support, as in spite of an influential board under £10,000

capital has been subscribed. The first dividend declared by the Company was 5 per cent., while in 1890 it fell to 2 per cent., and for the year ending June 30, 1892, a dividend of 2 per cent. was again paid. With the view of lessening expenses in the future, the Company since that date have had to dispense with the services of Mr. Insull, who has acted as their most able and energetic secretary.

Numerous cases have come under the notice of the writer, of private estates which have been divided for allotments, and, as previously remarked in this chapter, with varying success. In no case, however, have these included attempts to provide the small holdings with such buildings as would enable the small cultivator to obtain a living solely from the land, and at the same time provide the benefits which co-operation would give. An experiment commenced about a year ago might have done this under favourable conditions. In March 1892, Mr. Angus Holden, M.P., purchased a property of ninety acres near Driffield in Yorkshire, for the purpose of division into small holdings. This he placed under control of a committee, and the applications for the land were so numerous that 300 acres could have been allotted. With so many applicants it was found that the greatest satisfaction would be given by letting in allotments. Only two holdings of five acres each were therefore created, remaining land being let in areas of half to two acres each.

But before conclusions should be drawn as to the basis upon which small holdings might be successfully extended in England, some reference should be made to the results shown in other countries in which small holdings form a prominent feature in the agricultural system.

Small holdings in Ireland.—The extent to which the people in Ireland find a maintenance from small areas of

land is seen by the fact that the agricultural returns show there are over 110,000 holdings of under five acres in that country, and a further 155,000 holdings of over that area, but of less than fifteen acres. As a result of investigation into the small holdings system in three counties I have been able to visit in the West of Ireland, it appears to me that the results show the possibility of existence of a small holder, but also the difficulties of life attaching to that position.

The possibility of getting a living from the land must be admitted when we meet a tenant holding, perhaps, the same five acres or so which his father had before him, still contented with his position, and expressing his preference to remain upon that holding rather than to take a position as a paid labourer. On the other hand, when we see, as too frequently is the case, that the certainty of maintenance throughout the winter without charitable relief will solely depend upon the good yield of a crop of potatoes, the uncertainties and difficulties attaching to the position can be well realized. But in addition to these two points that any observer who has been among the Irish cotters will recognize, he may also notice the absence of any means of united action in practical agricultural matters, which would do so much to render the results of the small farms more certain and profitable.

Co-operation among Irish tenants desirable.—The presence of large numbers of holdings in particular districts would enable useful co-operation to be carried out. Yet these small tenants continue independently with the difficulties named in the first chapter as attaching to isolated small holdings, with the additional disadvantage that the price ultimately obtainable for some of their produce is

but little in excess of one-half the amount which would be paid in this country. The co-operative milk factories which have been established are of practical use, but the cost of each must make the number limited. A less costly means could readily be found which would be of some use. A cottage in a central position in every district in which small holdings are situated could be fitted up at the cost of a few pounds, and placed in charge of some competent person. Here pigs could be sent to be killed and cured, cream to be churned, or butter to be blended. There also eggs could be collected, and, possibly, poultry received to be prepared for sale. Loss of time in marketing would thus be avoided, and a far more certain quality, and consequently a better price, for products secured. With some such centre for the receipt of flax straw, the growth of that crop, which is remunerative and useful for the small holder, could be again revived. At present, it appears that the cultivation of this crop in the West of Ireland has practically ceased; and the area grown in the whole country in 1881 of 146,000 acres, had fallen in 1892 to 70,600 acres, the market having to be supplied with increasing quantities from abroad.

The same centre would, moreover, afford a means for introducing better paying cottage industries, both giving instruction and providing materials for the same.

The possibility of combination among Irish tenants has been shown by the operation of the Land League; and if the same power were used in the practical direction of providing a common centre for the collection and distribution of produce in manner here suggested, the lives of many Irish cotters would be rendered easier and their circumstances improved. It might even be found possible to again attempt in Ireland some scheme of the kind which

was tried at Ralahine, near Limerick, sixty years ago, and mentioned in Chapter VII.

If small hand husbandry farms were established in England, some seem to think they could not yield a more comfortable maintenance than they do to the Irish cottier. This is incorrect, for even without those facilities which can be so readily found here for dealing with products, the English small holder could certainly safely estimate to obtain half as much again in the price of the produce as the Irish tenant under present conditions. This excess would make the difference between obtaining uncertain support and a comfortable maintenance.

Small holdings in Channel Islands.—To find entirely successful results from small holdings it is necessary to go to Guernsey or Jersey. The former has an area of only 40 square miles, and maintains a population of over 35,000 persons. The average size of the farms is under seven and a half acres. The houses and buildings on these small farms with their attractive surroundings are of a character which no small holder in England can ever hope to secure. One of the reasons why small farmers in Guernsey have been able to maintain themselves, and save substantial amounts, is in consequence of the favourable climate. This allows produce to be grown and placed on the English market before home products are ready, thus realizing special prices. Climate, however, has not done everything, and other reasons why the Guernsey farmers are successful are because of the thorough hand cultivation, and the care and attention given to every detail. There is no waste of manure; the hedges and ditches are kept clean; every available yard of land is utilized; the dairy stock is carefully fed and reared, especially in view of the best milk and butter production;

all possible appliances are used to improve the product and lessen labour ; and there is some united action in realizing produce. These are characteristics only fully possible on a hand husbandry farm, and which the ordinary small English farmer too often overlooks. The case of Guernsey shows that neither peasant proprietorship nor low rents are necessary to ensure good results, for the majority of the cultivators there are tenants, holding the land at a rent of £4 to £7 per acre. The same conditions are found in Jersey, though the average acreage of the farms is there somewhat larger.

We have in this country as good a soil as is found in the Channel Islands, which with the same treatment will produce as good returns, though obtaining special profits from early markets is not possible.

Small holdings on the Continent.—A brief notice of small holdings abroad is necessary. The work of this character which excites most admiration is undoubtedly that of the Swiss peasant. High up in the recesses of the Alps we notice that every available plot of land is brought under cultivation by hand labour, even when apparently situated in an inaccessible position. Upon these small areas of arable land, with the right of common pasture for cow or goats on the wild grass, the Swiss villager, with the aid of the money earned during the long winter in carving and other indoor employment, is able to subsist. The work of cultivation is so hard that the women, upon whom the greater part falls, look prematurely aged, while the ordinary home of a Swiss peasant is even less comfortable than the cabin of many an Irish small holder. It must however be admitted that if a living can be obtained under such disadvantageous circumstances, it ought to be more easy to do so in

England, where so many more favourable conditions are found.

In France the larger farms are not managed with the economy, science, or skill which have been brought to bear upon the large farms in England. In consequence the yield of crops per acre from such properties is far less. Owing however to the system of division of land among the children on the death of any landowner, there are many small owners working properties for their own maintenance. Particularly in Normandy these owners co-operate for dealing with their saleable produce, which is chiefly eggs and butter, the former being collected by salesmen, and the latter sent to factories, where it is blended into one equal quality, finding a market at a profitable price in England.

The foreign country, however, to which England might most nearly approach in the matter of small farming is Belgium. This country, like our own, has many large manufacturing towns, but in place of these being dependent upon foreign supplies of food, they take the produce of small holders at home, who adopt an intensive system of hand cultivation, and by that means can raise nearly all the produce required by home markets. The condition of these small farmers seems in every way to be satisfactory, and both in their houses and in necessities of life they seem better provided than the Irish or any other Continental small holders. Their social condition is also generally described as being an advance upon that of the English agricultural labourer.

Perhaps small holdings have proved less satisfactory in Norway than in any other country. The disadvantages of peasant proprietorship there exist without any sufficient

means of co-operation. It is largely through the operations of the agricultural syndicates in France, formed since 1884, to introduce co-operative methods of dealing with produce, and to provide temporary loans, that the small owners in that country do not latterly seem to have increased their liability on their holdings. In Norway this has been done to a very large extent. From a Government return issued in April 1893, it appears that whereas the indebtedness of the landed proprietors in 1865 was £9,000,000, in 1887 it had increased to £19,400,000, and in 1892 to £28,700,000. In the last year named, the official value of the land, houses, and forests of Norway was £43,600,000, showing a very narrow margin of value belonging to the owners.

Conclusions from the results which have been noticed.

—In summing up the experience gained by the consideration of the results named in this and the preceding chapter, it must be admitted that success has been achieved by employing even unskilled men as labourers upon the land, when the class of labour is rough work requiring no previous experience. It further appears that a living can be made under certain conditions upon a small holding; but that if the small holder is to gain this with comfort, he must secure better prices than the Irish tenant obtains for the greater part of his produce. It further seems that good results on a small scale have always been obtained when the cultivation of the land is carried on in a thorough way by the hand cultivation of the tenant and his family without horse labour or hired assistance.

Before attempting to apply these conclusions, one question arises which must be determined. This is, whether we have in this country a market for such additional produce as the land might be made to yield under hand cultivation if this

were largely introduced. An inspection of the tables showing our imports for 1892 will establish this fact in the affirmative. Our imports of cheese, butter, bacon, poultry, eggs, and rabbits, all products of small holdings, exceeded £35,000,000. Flax and flax-seed and their substitutes, all of which might be grown here, were sent to this country to the value of £13,000,000. Wheat, flour, and feeding stuffs, which it would be necessary to grow in rotation with the green crops for dairy stock, were imported to the value of over £58,000,000. Fruit, potatoes, and other vegetables of a character which could be produced in this country, were sent here to the amount of £4,800,000. Lastly, there were imports of dead meat to the value of £11,000,000, a large proportion of which could have been raised in this country. The total of these imports amounted to over £124,000,000. In 1891 they were £123,000,000, and in 1890, £113,000,000, thus showing a continual increase in dependence on foreign supplies.

When we know of these increasing imports, and recognize that this dependence on foreign supplies would of necessity place this country in a most serious position in the event of war, it becomes the duty of all interested in our national stability to give careful consideration to any proposals made which might lead to supplying our national wants from the produce of our own land.

CHAPTER IV.

MANAGEMENT OF A HAND HUSBANDRY FARM.

HAVING considered the conditions under which small holdings have been successful, or have failed, it is desirable to apply the experience gained, and consider the quantity of land which one man or family should possess, if they could be established upon a small holding under favourable circumstances; how the same could be best laid out and managed under the ordinary conditions which exist in England; the amount of capital necessary; the probable results under various systems; and finally, whether these results are sufficiently favourable to justify further attempts to extend small holdings in this country as a means of maintenance.

Area of holding.—In the last chapter the principle which must be followed in fixing the area to be taken is stated, viz. that the holding should only be of that area which can be cultivated by one man and his family, without horse labour. In deciding what this should be, it must be remembered that the greater part of the cultivation upon any holding must be done between the middle of September and the middle of March. This period includes more than 150 working days. Frost and wet, however, would in average seasons reduce this number to about 110, while

in some seasons not more than 90 full days would be available. If six acres were cultivated on the four-course system of rotation by hand labour, it would be necessary to break up and fork over in this period four and one-half acres. This is as much as a competent man could readily accomplish in the number of days named, and in specially unfavourable seasons he might require a horse for a few days to do some part of the work.

Whether a tenant kept live stock or not would make but little difference in the length of time available to be spent by him upon the land, because the stock would be mainly attended to by members of the family. By the adoption of a five-course rotation a specially skilful man may be able to work a rather larger area than six acres ; but if his intentions are to cultivate the same by hand labour, it is in no case desirable that he should have more than seven acres, unless there be able-bodied members of his family to help him. It will therefore be assumed that an average farm will comprise about six acres of arable land. In addition to this, any quantity of old pasture not exceeding a similar extent would be most useful, and would only increase the labour at hay-time. Old pasture, however, would be so rarely obtainable, that in suggesting a system for general adoption, the possibility of obtaining it should be disregarded.

System of cultivation.—In determining the method of working a farm of the character before-named in a manner most likely to attain the object in view, there are four main conditions to be observed. These are—(1) As much as possible of that kind of produce which can be consumed by the tenant and his family must be grown. (2) The surplus crops must be of a nature that can be realized with abso-

lute certainty. (3) The crops must be arranged in such a rotation that the labour can be distributed as evenly as possible over the entire year; and (4) The cropping and manuring should be laid out in such a manner as to best ensure the continued or increased fertility of the soil.

In the case of land situated near a town, special garden crops would be the most profitable, and some of these conditions would in this case be disregarded; but there is comparatively so little land sufficiently favourably situated for market gardening, that it is not necessary to consider here this method of dealing with the land—more especially as the value of any land suitable for this purpose is generally already recognized. The method of cultivation adaptable to a small holding under ordinary circumstances will now be considered.

The system of cropping should first be settled. Although it is known that the same crops can grow year after year upon the same soil, yet there is no doubt that it is a far better plan to vary the crop year by year. If this rotation be well arranged, labour and cultivations will be easier; there will be less liability to continued insect pests, for insects which infest one crop will disappear when the succeeding one is of a different nature; and shallow-rooted crops alternated with deep-rooted crops are less exhausting to the soil. These and other reasons justify yearly alteration of crops upon the same land. If the same crop recur every three, four, or five years, it is termed a three, four, or five-course rotation.

The four-course rotation with occasionally certain variations will generally bring the best results upon a small holding. The four crops would be—first year, wheat; second year, roots; third year, oats or barley; and fourth

year, clover or grasses. Assuming entry was made upon a holding at Michaelmas, the land required for the yard and garden, of not less than half an acre, would first be fenced off. In order to introduce the rotation named, the remaining land would then be divided into four equal portions. The whole area should be ploughed, as this would render the subsequent hand tillage during the first year much easier work. The tenant should then prepare with the fork and other hand tools one of the four portions, and sow the same with wheat. Before the end of the year, if the weather be favourable, a second portion should be roughly cultivated, and left to be acted upon by the winter frosts, which do so much to create a fine seed-bed. Early in the succeeding year the third portion would be cultivated, and the second sown with barley. Later on the third portion would be sown for roots; while clover and grass seeds should be then put upon that portion of land already sown with barley. During the first year there would be a fourth portion to be cultivated, for which probably horse labour would have to be hired, and oats might be taken from this area. Clover and grass being a biennial crop, the portion sown with these seeds will only need cultivation every two years. Between April and harvest the labour on the farm would be light, mainly consisting of hoeing, and in other ways keeping clean the growing crops. It is during this period that most work would be required in the garden. In the first year the harvesting would consist of three-fourths corn, and one-fourth roots; but subsequently, every year there would be one-half corn crops, one-fourth roots, and one-fourth hay arising from the grass and clover seeds. Then in succeeding years there would be similar crops; wheat growing upon the portion occupied by grass in the

previous year ; oats or barley upon that previously occupied by roots ; and mangel, swedes, turnips, or cabbage upon the land previously occupied by barley or oats. The use of this rotation for economy of labour is obvious, as ordinarily only three-fourths of the area would have to be cultivated each year.

In place of the four-course system, a five-course rotation could sometimes advantageously be used. This would be accomplished by leaving the grass seeds unploughed for two years. The value of the hay for the two years would not much exceed that produced by one year of good clover, after taking into consideration the rent and expenses for the extra year. But on this five-course system an additional area could be rented, as it would not increase the annual labour ; and the additional aftermath grass would be useful for the cow and store pigs.

Whichever rotation were adopted, variations would frequently be made depending upon the amount of stock kept. Thus one-fourth the area might be too much for roots ; and beans or peas would be desirable. Then some of the land might be laid down in lucerne or other permanent forage crop, which in certain seasons would prove useful. Flax would be well worth attention if others in the neighbourhood were growing it, and might be taken in the place of a spring corn crop. Flax-seed can be put in later in the year than either oats or barley ; occupies less time in coming to maturity ; and if a market be obtained for the straw, is a profitable crop. Then additional produce can be raised by growing winter, or what are known as catch crops, such as tares, rape, mustard, &c. The desirability or otherwise of raising such crops will depend upon the condition of the land ; whether the tenant is skilful and sufficiently hard-

working to give the additional time ; and whether he keeps such stock as will consume the winter crop when grown. In certain cases potatoes could be taken from the land left for roots, to be followed by turnips in the same year.

The farmyard manure would be put upon the wheat, but would probably be insufficient for that purpose, and would have to be supplemented by purchased manure, which would also be required for the spring corn crop. The harvesting would either be managed by mutual help of neighbours who would join together for this purpose, or horses would have to be engaged when loading and stacking were being done ; in either case a horse being hired for carting. The cutting and binding of either of the corn crops could readily be managed by one man in three days, so the tenant, in addition to getting in his own harvest, could doubtless at harvest-time obtain remunerative employment from some large farmer anxious to have extra labour.

With reference to the yield of the crops, the tenant should certainly expect to get in corn and straw not less than 25 per cent. in excess of the average yield per acre on a large farm ; but the yield of the roots and clover would probably not be so much in excess of that average. The reason why the additional acreage return would be obtained is because of extra care in sowing, the better preparation of the seed-bed, the extra hoeing and weeding, and the more careful harvesting. Hand husbandry and high cultivation of small holdings might sometimes produce better results than those named, and the writer can refer to allotments in Huntingdonshire and Northamptonshire where 50 per cent. better yields than those obtained by the neighbouring farmers are not exceptional.

Of the produce obtained from the farm, the wheat should

be dealt with by being converted into flour. The produce of grain from the quarter portion of land consisting of one and a half acres, may be estimated at 54 bushels, weighing about one ton and a half, which after allowing for waste in milling, would leave about 2400 lbs. of flour and 800 lbs. of miller's offal. This flour if purchased retail could rarely be obtained at a lower rate than 6s. per bushel of 70 lbs., and at this price would cost £10, while the wheat at 26s. per quarter would be about £9. This shows the profit on having it ground, more especially if a mill were provided as forming part of the central farm buildings which should be erected upon any estate divided into small holdings. The difference in the price would pay the cost of milling, and the whole of the bran, pollard, and other products known as miller's offal of the total weight just named would be obtained without cost. The weight of flour mentioned would be more than sufficient for the consumption of any ordinary family, and the part not required would be sold. The method of dealing with the other produce of the farm would depend upon the live stock which was kept. This point it is now necessary to consider.

Cow-keeping.—The first live stock which a tenant should acquire would be a cow. If he had some pasture attached to his holding the keep of the cow would be rendered easier. In the majority of cases however the small holder will be established upon an arable farm, divided as previously described, and thus have no pasture for his exclusive use. It is however probable that a piece of grass land can be secured in common with other tenants upon which the cows may remain during the summer months. The actual nutriment obtained in that way would however be trivial, and therefore in keeping a cow the tenant must reckon that he

will either have to raise the produce required for its consumption from his own holding or purchase the same. The food of the cow would be hay, chaff, ensilage, and roots, with grass, clover, lucerne, or other green food during the summer months. All this would be provided from the farm. During part of the year an addition of dried grains or two to three pounds of linseed cake each day would be desirable. Although much depends upon the size and feeding of the cow, ten tons of roots, two tons of hay, and three tons of straw for litter and chaff would probably be sufficient in addition to the grains or cake, and green produce already named. Bran and pollard with meal from home-grown crops could be given; but it would be better to retain this principally for the pigs if these be kept.

A good cow will generally give 600 gallons of milk each year, and if carefully fed even a larger yield. A small holder should, however, be satisfied with about 500 gallons. From this 160 to 180 lbs. of butter could be made. It must be remembered that milk is not given in a uniform daily supply, and in certain seasons it might be two and a half or three gallons a day, even if the annual total did not exceed the last-named quantity. Thus there might be a loss because the market would be uncertain for a large proportion of the skim-milk, the supply being of a varying quantity. That which was consumed by the family or sold to neighbours, might be placed at a price of fourpence per gallon. It would be reasonable to apply this value to about one-half the milk, or say 240 gallons per year; and the remainder, in consequence of the uncertain market, might all have to be used for feeding pigs, and should not be estimated at more than half that value.

With these details it is now possible to come to some

conclusion as to the profit or otherwise of keeping a cow. The value of the produce, taking the quantity of butter as given above at the price of 1s. 2d. per pound; the skimmed milk as above-named; the calf at 30s., and manure of the value of 40s., would amount to just over £20. The cow would consume roots, hay, and straw, to the value of at least £15. Thus keeping a cow is not specially profitable, except that it would convert this produce into milk and other products necessary for family maintenance, and the surplus not so consumed would be more readily marketable than as crops. In the place of providing a separate cowshed for each tenant, it would be better to build a general cow-house with dairy and feeding arrangements as named in Chapter VI.

Pig-keeping.—The next most important stock for a small farmer are pigs, which are of a more profitable character. On such a farm as is named, three breeding sows might be kept, and the offal from the wheat with waste garden produce would be more than sufficient to maintain them for the entire year. Each of these sows would give a litter twice a year, the number of pigs in each varying, but most frequently being from nine to twelve. If from each sow twelve pigs are saleable every year, this must be considered a fairly satisfactory average, but cases are not apparently exceptional when from the two litters twenty have been left after weaning at six or eight weeks old. Pigs at this age are always saleable, though the price naturally varies with the supply. Before that period they would be fed to a small extent on skim-milk and barley-meal, and they should be sold as soon after eight weeks old as possible, except such number as it is decided can be kept to fatten on the farm produce. Two methods can be adopted with these

latter pigs. Either they can be immediately fed for fattening with pulped roots, barley-meal, &c., or they can be kept as store pigs, being allowed to grow for eight or ten months, at no other cost than the roots and waste green produce, and then for fattening each one would require one cwt. of meal.

The exact course to be taken would depend upon the season of the year, and what was the produce available for consumption. If a cow were kept, the produce available, after providing for the same, might consist of more than one ton of barley, about twenty tons of roots, tops of root crops, aftermath of grass, surplus green stuff, and waste garden produce. This would provide for maintenance of the three sows, and within the year enable six or eight of the pigs to be brought up to an average weight of 150 to 180 lbs., at which size they obtain the best price for bacon pigs. The average yield of straw from the three acres of corn would provide sufficient for litter for the pigs as well as for the cow.

Goat-keeping.—The keeping of goats is one branch of farming which should receive more attention from those cultivating a small area than it now does, and on any extended system of small holdings it should be more largely carried on. The goat will live on a larger variety of diet even than the pig, while if stall fed specially for milk production, it will be one of the most useful animals that any small holder can keep. A first-class milking goat two years old can be purchased for £2 to £2 10s., and will give for many months a milk supply of three to four pints per day, gradually getting less towards the time of breeding. Although like the pig it can breed twice a year, it is generally only bred from once, and then produces two, three, or four kids,

but usually the first-named number. These can be entirely taken from the mother at eight or ten weeks old. If female, they can either be sold at this age at 10s. or 12s. 6d. each, or kept until about eighteen months old, after which time they can be bred from, and the milk supply will commence. The male kids are usually dealt with by being killed for meat when a few weeks old.

Unless produced in large quantities the milk of the goat could not be profitably dealt with by the ordinary method of sale. No one, however, who knows the difficulty which villagers experience in getting fresh milk, can doubt that any small holder with two or more goats could daily find a sale amongst neighbours for the few pints a day which he might have for disposal after the wants of his family had been supplied. He could then increase his stock as a market was found for the produce.

Any small holder could safely begin with two milking-goats, the breeding being arranged so that one was in full milk while the other was dry. The housing could be in any out-house, the space required for each goat only being two feet six inches wide by four to five feet long. It might be allowed to have the run of the yard, but it would be most economical to have it fed in its stall with roots, green stuff, meal, bran, or oats, or any other food which was being given to the pigs, provided it was clean and sound. Furze, acorns, or horse-chestnuts are all acceptable foods. When abundance of milk is wished for, plenty of succulent food is desirable; when increased richness is wanted, cake or meal can be added. The animals must be kept dry, their food and houses clean, and they must have change in diet. With these three conditions there is no difficulty in keeping goats healthy, and in profitable condition. If market value were

paid for all purchased and other food consumed by a single goat, it would amount to nearly £4 a year, though actually the cost would be less from the fact that goats will consume much that would be otherwise valueless and wasted.

The writer noticed that on the farm settlement at Frederiksoord in Holland, almost every tenant kept a variety of Friesland sheep, giving a quart to three pints of milk each day; and in many cases these same tenants also had a cow, the whole produce of the latter being sold. Almost every Irish labourer in the western district who has any land from which food can be grown, and many a small holder who has not sufficient capital or food for a cow, appears to keep one or more goats. The Agricultural Returns of Ireland for 1892 show that the goat is more numerous in that country than the pig. In Switzerland also it is the goat upon which the family depends for a milk supply; while in parts of that country, and also in France, goats are frequently kept upon large farms, the milk being used for the making of Gruyere and other cheese. For this latter purpose the milk is specially valuable, but until more attention is given to the rearing of the goat in this country such farms are not possible.

Poultry.—Perhaps there is more difference of opinion as to the profits from poultry-keeping than in any other department of farming. Experience, however, shows that it is possible to come to very definite conclusions on this subject, which can be briefly expressed as follows :—

(1) If poultry be kept without any special attention to their needs or requirements, beyond being supplied with corn in addition to what they can pick up for themselves, then low production, accidents, risks from disease, costs of maintenance of sheds, and other causes, will so reduce the

returns that the poultry will not even pay for their food and other incidental expenses, even if nothing be paid for labour.

(2) If the fowls be kept by some one (*a*) personally interested in their success, (*b*) who understands the system and principle of poultry keeping, and (*c*) who can give some time to the poultry-yard, then the returns will be sufficient to pay for all food and expenses, and will leave a margin of profit as a recompense for the labour expended upon them. More especially under these conditions will poultry be profitable if a large proportion of their food is wild, or of home production which would otherwise be wasted.

(3) Under no circumstances can any poultry farm yield a sufficient profit to pay for skilled labour solely engaged on this work ; unless in exceptional cases where such farms are used for the purpose of rearing pedigree or prize birds. Even then there are great risks, and it is doubtful if any poultry farm so carried on has given profits for many consecutive years.

There is a popular impression that the large quantities of eggs which we import from France come from poultry farms there. Such is not the case. They are all produced upon small farms where the fowls are kept by persons answering the description named in the second condition above. If the same personal interest, knowledge, and time could be given by a tenant of a small holding in this country, he would find it desirable to keep poultry ; otherwise, it would be useless and unprofitable for him to do so.

With this proper management and attention the poultry-yard could be commenced in the autumn with pullets hatched early that spring. By careful treatment and special food, eggs would be obtained all through the winter, and as

many hens as possible set early for hatching with the view of getting early chickens. These would then either be fattened for sale when a good price could be obtained, or kept for laying in the ensuing winter. Then when the autumn came again the old hens would be killed and sold, unless of certain breeds which lay well a second season. Many hens could hatch two or three sittings of eggs a year ; but in estimating a possible return it must be remembered that some good layers will not sit ; that incubators are still uncertain, while there is always extra trouble with chickens so hatched ; that there are great difficulties in rearing large broods ; and lastly, that many which are hatched do not live to a saleable size. Taking into consideration these conditions, and the varying egg production, though some hens will lay 150 eggs each year, it must be considered a satisfactory average result if five chickens and 75 eggs are saleable from every hen in addition to replacing old stock each year. This would give an average value of about 12s. 6d. to the produce of each hen, assuming the chickens were sold young. If the latter be kept longer, the additional price would be nearly made up by the cost of the additional food. The cost for each hen, if the biscuit meal, corn, and other food were all purchased, including the early food of the chickens, would be about 6s. 6d. a year. This, therefore, would leave an annual profit on the hens of 6s., or less than three-halfpence a week each, in payment of the labour expended upon them. This seems but little remuneration. To a small holder, however, keeping twenty hens, it amounts to £6 a year ; which may be increased to half as much again if part of the food is home grown, or of no saleable value. Too large a number of fowls should not be kept, otherwise a greater proportion of the food would have to be

purchased, and there would be greater difficulties in giving proper attention to the work.

But fowls are not the only description of poultry that it is possible to keep. Under certain circumstances ducks, geese, and turkeys may also thrive and be profitable. None of these however are adaptable for small holdings under the usual conditions.

Ducks of a good strain lay well, many cases being found in which commencing in December the bird will lay an egg each day up to May or June, with rests at occasional intervals. The rearing and fattening of ducks is profitable if they are managed in large numbers, which cannot be satisfactorily done on a small holding. Some who keep a few hens, hatch out ducks' eggs, which is a good plan, provided there is a market for the ducklings when young. They do not pay for the trouble and expense of food for fattening unless receiving special care and attention, and treated on a large scale.

Geese are more profitable; but large grass runs are necessary to keep the mother birds healthy, and the young ones to fatten profitably should be supplied very largely with grass and green food. Unless there is some large area of rough grass in the neighbourhood, they cannot therefore be kept by the small holder. When however these facilities are present, to rear and fatten goslings is a profitable department of poultry farming.

The breeding of turkeys is undoubtedly the most profitable of any description of poultry-keeping, but only to those who have the necessary special skill, and can give all that attention to the young turkeys which is necessary during the first few weeks of their existence. In the absence of this special care the work is risky, and probably in two or

three years will result in loss. A return from this source must not therefore be looked upon as an ordinary means of income from a small holding.

Rabbits.—Rabbits are frequently recommended as being worth the attention of the small holder. No doubt this is the case to some extent, but the profit is so small in return for the thought and work necessary, that rabbit-rearing should scarcely be regarded as coming within the category of ordinary farming. In order to yield a sufficient profit to the small holder to remunerate him for his labour, rabbits would have to be kept on such a large scale as really to render the scheme too risky to be undertaken. When however the small holder has a family who can attend to the few wants of these animals, and rear sufficient of them for home consumption, it is a desirable and profitable course to adopt.

Bee-keeping.—One matter upon which there is a large amount of misapprehension is bee-keeping. It is thought by some that here at least is a branch of country work which requires neither skill nor experience. Only those can think this who have never kept or attempted to keep bees. There is a great deal more work than merely providing the hive and taking the honey. Winter feeding, summer feeding, wintering, driving, swarming, arrangements for breeding, queen raising, hive ventilation, and various other subjects are all matters of which a bee-keeper, to be successful, must have some knowledge. In addition he must be acquainted with the habits, instincts, and diseases of bees. Even with a sufficient knowledge of all these points the honey yield will be precarious and uncertain.

Any one who wishes to become a bee-keeper successfully, without the risk of much loss, had better be content to

obtain in May or June a single swarm in a straw skep, fitted with standard frames. They must then learn as much as possible from experienced neighbours, or possibly from a bee expert attached to a bee-keepers' association; watch attentively the habits of the bees; and learn practically how to manage them. Even if in the first autumn no honey is obtained, yet if the bees are alive and strong in the following spring, and the bee-keeper is sufficiently interested to continue the work, he may then increase his stock. With good management in ordinary seasons he may be able to get at least thirty or forty pounds of honey from each hive, while double the amount is not exceptional. The feeding and other expenses will not exceed 5s. or 10s. for each hive, not including the original cost.

Garden.—Having noticed the various ways in which a small holder could use his farm land, consideration should be given to the use of that portion of the land which is retained for the yard and garden. For the house and yard one-eighth of an acre should be allowed, this area providing for a grass-plot 30 by 50 feet in the front of the house, and for a yard 30 by 100 feet in the rear. The kitchen-garden should not exceed three-eighths of an acre, equal to about 80 to 200 feet. Half this should be in potatoes, and would raise nearly one ton, which weight would provide for home consumption a supply of six pounds per day throughout the entire year. The other half during the summer should be used for green vegetables, and when the land was cleared, ample room could be found for cabbages, brussel-sprouts, and other crops which stand the winter. If the tenant wished to undertake fruit-growing, about one-eighth of an acre should be planted with bush-fruit. This area planted at an average of four feet apart would take over 300 bushes.

In the case of poultry being kept, another eighth of an acre would be wanted for a poultry-yard; unless they were kept in portable poultry-houses, the run being upon the grass. If an acre had been allotted for garden purposes, then the remaining quarter of an acre could be most usefully used for growing lucerne or comfrey; unless the tenant had sufficient labour in the family to undertake the heavy extra work of cultivating it as a garden.

In this last case, although the additional vegetables could not be consumed by the family, attention should be devoted to the most saleable products, such as sea-kale, celery, tomatoes, mushrooms, or asparagus. Or if live stock were largely kept, a greater weight of green produce could be raised for their consumption than if a crop were grown not involving continuous cultivation. A small proportion of the fruit might be sold either fresh or preserved. Produce from sales, however, unless in exceptional cases, would not be important, and should be considered satisfactory if only sufficient to pay for the manure and seeds used for the garden. The greater part of the fruit should be preserved for the winter consumption of the family, and, if possible, suitable arrangements for so preserving this fruit should be provided in a central position, for the use of any who wished for it.

Financial results of a hand husbandry farm.—The first question which arises under this head is as to the amount of capital necessary for the tenant, assuming the buildings were erected by the owner.

He must have sufficient money to purchase the requisite farm stock; to pay the ordinary farm expenses till harvest; and to pay his expenses of maintenance up to the time when he can get some income from the land or stock.

Assuming that he enters upon the holding at Michaelmas, and keeps a cow, pigs, and poultry, the necessary amount can readily be calculated. For the purchase of one cow, three sows, three cockerels, and twenty hens, it will be necessary to be provided with £35. For food for this stock until the pigs were sold certainly £8 should be in hand. For tools, implements, and sundries for working the land, at least £10 would be necessary. Having the milk and eggs, there would be some weekly return coming in, and a further sum of £7 for the expenses of maintenance might be sufficient, making a total of £60. This amount would make no allowance for accidents, contingencies, expenses of temporary fencing, or housing of stock, &c. ; and unless the tenant were possessed of a further sum of £20 he might not be able to comfortably carry on the farm unless he obtained credit for some of the articles purchased. Without a cow, the capital required would be almost the same, for though the first expenditure would be about £20 less, yet it would require a larger amount of cash in hand, as there would be no weekly income for maintenance of the family.

Now, as to the annual payments, the first expense would be the rent of the land. Many of those who at the present time complain that rents of small holdings are too high, forget those circumstances which are bound to make the acreage rent higher than that of land forming part of a large farm. In the case of the small farm there is a much larger proportion of rent to be allowed for the buildings; the dilapidations and costs of repairs to the same are larger, in some cases, in fact, absorbing a year's rent of the entire holding; the land used for the small holdings must have a road frontage, and for this reason is more valuable; there are

more risks of not getting the rental through partial non-occupancy; the land must all be of good quality, while some proportion of a large farm is often of an inferior description; and the management of a number of small lettings is more expensive than if the same total rent were paid by one tenant. These are some of the reasons which go to support a rent of £2 or £3 per acre for small areas, even when the average rent of large farmers in the same district may be only 15s. or £1 per acre.

In order to assess the rent of such holdings as are suggested herein, it is assumed that a large farm be subdivided and special buildings erected. The farm which would be suitable for this purpose must have a good loam soil; be thoroughly under-drained or on a well-drained subsoil; possess a level surface, or with only a gradual slope; be in a first-class state of cultivation; and have good road access. Such a farm even at the present time would command a rent of probably 30s. per acre, including tithe rent charge, while local rates would be another 5s. per acre. This would give a rent for the land only of the suggested six acres of £10 10s. *od.* a year. As to the buildings, interest on £175, the smallest possible cost of house, cow-shed, sheds, and outbuildings, would at 4 per cent. be £7. This would make a total rental of £17 10s. *od.* per annum.

The next most necessary outgoing would be manure. The variety and kind of this would depend upon the particular crops. If a cow were kept, the manure from this and the pigs would be worth £4 per annum, and the addition of another £8 would be sufficient, this being an allowance of £2 per year for each acre. The cost of seed would average £3 per year. Horse labour would be

necessary for the hay and corn harvest, and also for other occasional carting, and this with extra manual assistance might cost as much as £4. There is then the item of renewal and repair of tools and various farm appliances, for which £3 should be allowed. This would make a total payment for farming incidentals of £18 per annum.

The next outgoing which should be estimated is interest on farming capital. Whether the whole of this amount belonged to the tenant or not, the farm should be charged $7\frac{1}{2}$ per cent. interest upon the minimum amount, as even if he did not borrow he would be able to get this return by investing the same sum in an industrial enterprise. Another expense which a small farm should be charged with is an insurance fund for replacement of live stock. This alone will give security of livelihood to the small holder, for unless it is in existence the unexpected death of an important part of his stock will frequently cripple his resources and lead to his ruin. A sufficient sum must therefore be estimated from the profits to cover this risk. A live-stock insurance company will insure cows at about 7 per cent., and pigs at 8 per cent. upon the amount insured. This however must not exceed two-thirds the value of the animal, and only applies at a comparatively young age. To cover the small holder against the whole of his loss, and to allow of the replacement of old stock with new, more than double that percentage should be taken ; and it will be found reasonable and useful if 20 per cent., or one-fifth the value of the stock, be charged to a fund of this kind. These several items with any sum paid for food for live stock will be found to include all the ordinary expenses of a farm of six acres.

It is now possible to give an estimate of the probable profits from such a farm. This will be best shown by

giving the probable average receipts and expenses of a holding where a cow, pigs, and poultry are kept in the manner suggested herein. Under such a system the financial statement would be as follows:—

RECEIPTS.			PAYMENTS.		
	£	s. d.		£	s. d.
170 pecks of flour at 1s.			Rent and rates on land	10	10 0
4d.	11	5 0	4 per cent. on cost of		
Surplus barley, roots, and			buildings	7	0 0
hay	10	0 0	Manure	8	0 0
180 lbs of butter at 1s.			Seed, horse labour, tools,		
2d.	10	10 0	&c.	10	0 0
240 gals. of skim-milk at			7½ per cent. on capital	4	10 0
4d.	4	0 0	Insurance fund ...	6	0 0
30 pigs at 12s. each ...	18	0 0	Cake for cow	3	0 0
6 pigs (180 lbs. each) at			Food for poultry ...	6	0 0
75s.	22	10 0			
1 calf	3	10 0			
100 chickens at 1s. 3d.					
each	6	5 0			
1500 eggs at 8s. per 100	6	0 0			
	92	0 0		55	0 0
Harvest wages, &c. ...	5	0 0	Profit	42	0 0
	£97	0 0		£97	0 0

The produce not specifically included in this statement might consist of about 4 tons of straw, 30 tons of roots, 4 tons of clover hay, 9 quarters or over 1 ton weight of barley, 240 gallons of skim-milk, about 7 cwt. of miller's offal, and a large quantity of green produce. All this is grown and reserved for the consumption of the cow and pigs, and in average seasons after providing for this purpose would leave the amount named in second item of receipts. There is also no notice taken of the garden produce; as except for such small part as could be sold to pay the incidental expenses of the garden, it would be used for consumption by the family. A part of the produce entered

above would also be used, but had to be credited at its saleable value. The growth of flax, production of catch crops, or the addition of some area of grass land in addition to that required for the cow, would give additional profits.

All the items given on the receipt side will vary from year to year, but it will be found that what is stated above is a fair average. The second item given, viz. the unconsumed surplus produce, will be the one most subject to variation. No larger number of stock should be kept than could be maintained upon the smallest quantity of produce which would be likely to be grown even in bad seasons. In average seasons therefore, if only the stock be kept and fattened which is named above, the unconsumed surplus would equal the sum above credited, while in favourable seasons it might reach the amount of £20, especially if flax or seed-corn had been grown. The sum of £5 credited for wages earned by the employment of the tenant is low, and in a majority of cases this could be doubled. When there are years of failure of crops, it will not make so much difference as might at first be imagined. If the products were all of one character, there would be considerable risk as to whether a sufficient living could be secured, but with corn, roots, hay, dairy produce, and bacon, it is scarcely possible that there would be a failure in all these in the same year. If such an event did happen, then the expenses would be less. If any of the stock died, then the whole cost of its replacement would be covered by the insurance fund. With a factory for the general use of tenants, as will hereafter be suggested, the average prices for products will never fall below those given above. Without such factory, at certain times it may do so, but in other years the price will be in excess of those mentioned.

It may therefore be considered that any man with his family who possessed sufficient experience could rely upon an average return equal to that shown. This it will be noticed is about 16s. per week ; but without poultry, nearly 3s. per week less. This return is not only for the labour of the tenant, but also for that of his wife, without whom such a system of farming would not be possible. Although the income seems small, the tenant will have the fruit and garden produce, worth for consumption 3s. to 4s. a week. An ordinary agricultural labourer might get some of this ; but though he could almost invariably get land if he wanted it for garden purposes, he would not have sufficient time to fully cultivate the same.

As compared with the agricultural labourer, the work of the tenant would be more anxious, and at some periods of the year more arduous ; but he would have greater variety of work, increased independence, more leisure at certain periods, full remuneration for any special knowledge which he possessed, greater chance for himself and family doing profitable industrial work at home, and more comfortable house accommodation.

As compared with the London or town labourer, the small holder would have generally less uncertainty of getting a living ; better house accommodation ; reduced expenses, the saving in house-rent alone being 5s. or 6s. per week ; vegetables and fruit supplied without cost ; other necessities produced from his holding ; his family would have a more healthy life, with greater variety in choice of occupation for the future ; opportunities would occur of being able to make additional income by keeping a goat, rabbits, or ducks ; and a substantial sum could be realized from the products of some domestic industry. The income would

be so small that even with these advantages there would be no sufficient inducement for a skilled artisan with a certainty of continuous employment to take up country life.

It would not, however, be unattractive to any unskilled labourer, who, it is seen, is certain to be able to obtain a maintenance from the land if he is prepared to work, is able to acquire the necessary experience, can obtain in some manner the requisite capital, and perhaps, most important of all, has a capable wife. As the position would have attractions to this class, it would be still more eagerly sought after by casual wage-earners.

But it may be asked, cannot a small holding be worked without live stock, necessitating as it does additional responsibility and probably anxiety as well as special skill? In order to see whether this can be done, it is necessary to draw up another balance sheet showing the price at which the crops might be realized. As under this system no manure would be made upon the farm, the whole cost of same, viz. £12, must be charged among the expenses instead of £8 as before-named. No buildings being necessary on this system, interest should only be charged on the cost of the cottage. The general expenses would be rather less, so that the result of this method would be about as follows, putting the produce at the value it might average upon the farm:—

RECEIPTS.			PAYMENTS.		
	£	s. d.		£	s. d.
7 qrs. of wheat at 26s.	9	2 0	Rent and rates on land	10	10 0
9 qrs. of barley at 25s.	11	5 0	4 p. c. on cost of cottage	5	0 0
4½ tons of straw at 34s.	7	13 0	Manure	12	0 0
4 tons of clover at 85s.	17	0 0	Seeds, horse labour, &c.	7	10 0
30 tons of roots at 9s.	13	10 0	7½ p. c. interest on capital	4	10 0
Harvest wages ...	5	0 0	Profit	24	0 0
	<hr/> £63 10 0			<hr/> £63 10 0	

Thus showing less than 10s. a week in addition to house-rent, vegetables, waste produce, &c., which would at least keep a goat. In order to ascertain the acreage profit, harvest wages and interest on cottage must be deducted, when it will be seen that it is £4 per acre. In addition to the income named, there would be the earnings of the family in various branches of industrial work, which would exceed the amount that could be earned if the farm stock had been kept, attention to which would occupy some time each day.

It must, however, be remembered that in the majority of cases it would be difficult to find a market for small quantities of farm produce at a full value. This is the principal reason why a small holder must generally convert the main part of his produce into butter or bacon, for which there is always a demand. If a number of small holdings were collected upon a settlement, with a central store where all the produce could be purchased, then the return from sale of the crops, instead of feeding stock, might be rendered more reliable.

Joint tenancy of a small holding.—Hitherto the small holder has been considered as a man with a family. If, however, single men wished to get a living in this manner by combining together, they would obtain exceedingly satisfactory results. Three competent men could work an area equal to three of the farms the possible balance sheets of which have been given; and remembering that there will be a saving of interest upon two sets of buildings, each man might expect profits amounting to an average of nearly £1 per week. Living in one cottage could scarcely cost more than that sum for the three together. It would not, therefore, be unexpected if a careful tenant, on this basis, found

himself richer by £20 at the end of a single year, after paying his maintenance and personal incidental expenses.

The probable returns from a small holding worked with and without stock having been shown, it is obvious that any intermediate course between these two extremes could be taken. The actual course to be adopted would depend much upon local conditions. In some cases the growing of corn and other crops for seed would be desirable, and if the position were accessible to markets, potatoes or peas would pay well. Catch crops would much increase the food available for feeding the stock, and thus increase the returns. If there were some pasture attached to the holding, this would leave the arable land free for the larger production of crops for sale. In these various ways ample variety would be afforded in farming work, and those having special powers, experience, energy, or forethought, could take advantage of various openings, and obtain a reward for their discernment and increasing skill.

Comparison with small horse labour farms.—It would be desirable to compare the position and work of such a tenant with that of one who was working fifty acres of arable land with a pair of horses. By referring to the results from six acres, selling the produce as previously mentioned, it will be seen that the probable profit shown was about £4 for each acre, this sum being to remunerate the tenant for his labour. The expenses of working a farm of fifty acres efficiently, not including labour, would possibly be about 30s. less per acre than given in that assumed balance sheet, in consequence of the cost of buildings, interest on capital, and incidental expenses being at a less rate per acre for the larger area. The produce of the land worked by horse labour would, however, be 25 per cent., or nearly £3 per

acre less. This would, therefore, give a return of about £2 10s. per acre, or £125 from the fifty acres to provide for remuneration of tenant and expense of horses. This is the same return which was stated on page 38 as being probable from a farm of this area in favourable seasons.

The tenant of the larger area would be more constantly employed, for not only would there be work on the land whenever the weather permitted, but there would be the regular and continuous work of attending to the wants of the horses on Sunday and other days. To realize the same profit as could be obtained from a small holding under hand husbandry, a much larger quantity of produce would have to be dealt with, this requiring increased capital and bringing more risk; less attention could be given to the minor products of the farm; while, with the additional responsibilities of the horses and larger area, the tenant would seldom be able to leave his work for a few days at a time, which a tenant of a small hand husbandry farm could occasionally do.

For these reasons it is not surprising to find small tenants who employ horse labour frequently in difficulties; nor does it seem desirable to encourage an increase in this class unless under exceptional conditions. These conditions may be considered to exist when the land is near to some town, so securing a certain market for produce at specially profitable prices; when the tenant has sufficient skill and experience to work an arable farm for the raising of dairy produce, under the system explained on pages 189—192; or when at least an equal area of pasture can be included with the letting of arable land at a reasonable rent.

Summary.—The main conclusions arrived at from this chapter may therefore be stated to be as follows :—

(1) No man without the requisite knowledge and some money can obtain a comfortable living from the land. (2) An active man having the necessary experience will find full employment during that period of the year when the weather permits of labour upon the land, if he works about six acres of arable by hand labour. (3) A man possessing the necessary skill and some capital, can obtain a living from such an area, especially if assisted by a wife and family ; but a substantially smaller acreage, under ordinary conditions, would be insufficient for that purpose. (4) The work will be hard, and more anxious than that of an agricultural labourer. (5) The small holder will have much time available for indoor employment at those seasons when work on the land is not desirable. (6) A competent man working the area suggested by hand labour would have an easier life, with, possibly, more satisfactory profits than if cultivating a small farm on the ordinary system of horse cultivation.

Village artisans and others from the rural districts are now flooding our towns ; large numbers of unskilled labourers already there have become casual wage-earners ; and under the conditions of competition which now exist, there are thousands who, through their misfortune or their fault, are joining the apparently ever-increasing crowd of unemployed. Are there amongst any of these classes, men of steady character, who are prepared to acquire the necessary experience, and who will work faithfully in order to secure an independence for themselves, and for those whom they should support ? It certainly does appear that there are many thousands who have these necessary qualities. If this be correct, then the conclusions arrived at show that these men can be brought " Back to the Land." This object is a desirable one to attain ; not only for the benefit

of the men themselves, but also for the country, whose productive powers will be thus increased ; while the present great pressure upon the labour market will be reduced, and the claim upon Poor Law Relief lessened.

Recognizing, however, the two great difficulties of want of skill and want of capital, before the object named can be achieved, a method will be noticed in the next chapter by which men now unskilled in landed work can gain the necessary experience and capital, if they do not already possess it ; at the same time also obtaining a knowledge of some useful indoor industries, which, it will be noticed, is one of the necessary conditions of success.

CHAPTER V.

THE TRAINING OF MEN UNSKILLED IN RURAL WORK.

IT is clear, after consideration of the foregoing, that no man can be established upon a holding where he can obtain a permanent livelihood, unless he possess a knowledge of agricultural work and some capital. As we have seen in the last chapter, establishment upon the land has but few attractions to the mechanic or to the wage-earning agriculturist, while it would be gladly welcomed by the destitute labourer, at present unskilled in work on the land. Can any means be found for giving such men these two necessary qualifications?

Unskilled labour on rough land.—In approaching the consideration of this question, which is the subject of this chapter, it is necessary to refer to the experience gained from the various efforts to employ unskilled men on the land, which are mentioned in Chapter II. After consideration of the results there named, it will be admitted, experience has shown that men unskilled in agricultural labour are worth more than their cost of maintenance if employed on breaking up rough land, or on any other work necessitating nothing beyond a knowledge of how to use a pick-axe, a shovel, or a fork. When any experiment has tended to show the converse, it has been owing to causes which might

have been avoided in the choice or organization of the property. Hence if an estate were found, upon which work of this kind would be a profitable expenditure, this class of men could be employed on the same, and so might possibly gain the skill necessary for agricultural work in the future. But the employment of labour on such a basis would need continual expenditure of capital, or if the increased value of the property which would justify such expenditure were not recognized, an annual sum would be necessary to maintain the work, as is shown by the German farm colonies. Either of these alternatives would prevent the farm from being considered self-supporting. It will, however, only be necessary in order to render the farm self-supporting, to go a step further than other experiments have yet done. This step will be to obtain a property not consisting solely of rough improvable land, but one which also has a substantial area in good condition and adaptable for hand cultivation by those men who have proved themselves efficient labourers upon the rough work.

Those who have given attention to the work of such men as are upon the Hadleigh Colony (who may be taken as typical of the unemployed class), will admit that after a few weeks' experience, at least half the number of such men would be competent for employment in hand cultivation. In the preceding chapter it was shown how a man sufficiently skilled in agricultural work would be able, under certain conditions, to obtain a sufficient maintenance for himself and family, from an area of six acres cultivated by his hand labour. If men were employed as labourers upon a large farm, having the same proportion of land for each man, so good a return could not be expected. There would not be the same incentive to do perfect work ; poultry and

other minor branches which the family would carry on would be absent; and there would not be the same opportunity for utilization of the waste products. Although these disadvantages would exist, it must not be forgotten that the large farm would give some economy in labour; possibly permit more profitable cropping and harvesting; and secure more expert management. From a detailed consideration of the effect of these various matters, it would appear that whereas from a small holding a man would be able to produce by his own labour sufficient to maintain himself and a family of four persons, the same work given by him as a labourer under direction upon a large farm, should certainly yield sufficient for the maintenance of two men. It will be seen that this means the allowance of three acres for each man maintained. That acreage cultivated as part of a hand husbandry farm, with the advantages which the latter would possess, might be relied upon to yield produce of a value of at least £27, and probably as much as £35. The food of a man housed in barrack buildings would not cost more than £16 a year, thus leaving an ample margin to pay for clothing, other costs of maintenance, incidental expenses, and interest on capital.

The principle therefore to be adopted to ensure a self-supporting training farm is to test the capability of the men on rough work, and use the labour of those who prove themselves efficient in hand cultivation, in such manner that they could raise from the land sufficient produce to maintain all who were living upon the farm. These would partly consist of the efficient workers employed on the cultivatable portion; and partly of unskilled workers being tested and trained on rough land, which would be gradually improved by their labour, and thus rendered able to support year by

year an increased number. Further, to ensure the absolute certainty of such a farm being self-supporting, a safe estimate of the probable annual produce might be made each autumn, and no larger number of men received during that year than could be supported upon that total amount, after deducting interest on capital and incidental farming expenses. No doubt a number of the men who proved themselves efficient would not be willing to remain doing the cultivation work of such a farm receiving only trivial remuneration in addition to their expenses. A sufficient proportion, however, would be found who would be willing to use their full powers as labourers on these terms, when they saw that by remaining upon the training farm they would secure a chance of independent life in the future.

Utility of the work to Poor Law Authorities.—But before taking into consideration the suggested principle in its practical details, the use of such a self-supporting farm must be looked at from another aspect. Hitherto I have referred to it as a training farm, the spending of some time upon which will be a necessity to any man now unskilled in agricultural work, who may wish to become either a tenant, leaseholder, or purchaser of a small farm in this country, a co-operative worker on some agricultural property, or a settler on land in one of our colonies. Nor would it be desirable for any man to be allowed to consider employment upon such a farm on the terms named a satisfactory arrangement for a permanency, even if some would be found so dependent in character as to be contented with such an arrangement.

If, however, the details which we are about to consider show that such a work can be undoubtedly self-supporting, it certainly does become a practical question as to whether

it would not be desirable for some Poor Law Authorities to find the capital necessary to start such a work in certain districts as a means of providing temporary relief. Such a farm would lessen the cost of casual relief; would give to unemployed men a chance of earning that maintenance which they would otherwise only get by becoming dependent on public or private charity; would afford the best possible test whether a destitute man was a lazy tramp or an honest worker temporarily out of employment; and lastly, if the latter, it would provide the best possible opportunity of assisting him to gain an independent life in the future. It was because these results were considered worthy of achievement, that the colony near Bielefeld was organized twelve years ago; it is because it proved useful in these ways that twenty-one more colonies have been founded in Germany since that date. If we see that with the experience and advantages we possess, it is possible to obtain the same results, but on a certainly self-supporting basis, is it not likely that some English capitalists, in co-operation with our Poor Law Authorities, will make some effort of the same nature in this country? We will now, therefore, consider the necessary conditions under which the principle before-named can be put into effect, whether with the general object of training those men who specially wish to obtain a living from the land, or of giving work to those temporarily unable to get employment, who would come to the farm as an alternative to begging or starvation.

Method to ensure work being self-supporting.—The first necessity would be the acquirement of an estate consisting mainly of cheap rough land, upon which capital might be expended at commencement, but also having a considerable proportion in good cultivation. That such

estates can be found is shown by the Salvation Army Farm Colony at Hadleigh. There is on that property some of the best class arable land, valued in the past, I believe, at over £60 per acre. The greater part, however, was land which, though once arable, had been allowed to go out of cultivation, and only required to be broken up again and carefully managed before yielding substantial crops. Other still poorer portions required draining, and other treatment, as well as partial hand cultivation, before they could become of substantial value. Lastly, a large area of saltings is included with the property, not worth £2 per acre, which, with cheap labour, can be profitably embanked and reclaimed. It is no doubt difficult to find in England properties so particularly suited for the purpose as the one just named. In the present condition of agriculture, however, too frequently we find farms which through inferior access, or other causes, have come into possession of landowners not possessing the necessary capital nor inclination to farm. Such properties are therefore either out of cultivation, or in poor condition, and purchasable at a cheap price. Though this class of property would not admit of such profitable improvement, nor afford so much work of a varied nature as the farms at Hadleigh, yet it would be adaptable for the purposes desired if a neighbouring farm in good cultivation were also secured.

Having obtained the property, the system of farming to be adopted would have to be determined. Although to grow wheat for sale cannot at present prices be remunerative, sufficient of this crop should be grown to supply all the flour required for home consumption. Then all the vegetable produce, and milk which with its bye-products would afford cheap food for those upon the farm, should be raised. These

together would not occupy more than one-third to one-half the area available, and from the remainder, produce would have to be raised for sale. Evidently this should be of a character to take the place of those articles of food which are imported, not because they are of less cost to the consumer, but by reason of the insufficiency of home production. On referring to the concluding portion of Chapter III., it will be noticed that the imports of what is direct or indirect produce of the dairy, exceeds in value £35,000,000 per annum, the whole of which quantity could be profitably obtained from our land. To give only one instance of this, the largest retailer of butter in London sells over 70,000 lbs. each week, not any part of which comes from England, though if the butter could be produced here in sufficient quantity and of uniform quality, he would willingly pay the same price as he now gives for butter from Normandy, which is from 2*d.* to 4*d.* per lb. higher than our farmers obtain in country markets. Evidently therefore the system to be adopted would be to grow produce of this class for which there would be a certain market, till at least another million acres in this country were used for this purpose. To carry out this system, cows should be kept in the proportion of two to every five cultivated acres available for this purpose. The manner in which this area could maintain cows in this proportion will be seen on reference to page 190. In order to simplify the estimates which will shortly be given, the yield of the farm is taken at the value of the crops only, and the additional price to be realized for the milk, pork, bacon, or other ultimate products will at least pay for the additional labour.

Having decided upon the farm, the estimate of the probable yield commencing from the following autumn should then

be made. The produce will vary in accordance with the seasons, but careful consideration of the capabilities of the land, the system of farming to be adopted, the probable expenses, the average yield from the crops, and the lowest market prices for the ultimate products, will enable an average return for the succeeding year to be estimated each autumn. We may assume, for example, that the farm consisted of six hundred acres of arable land, not including improvable waste or the area not under cultivation. After giving consideration to the whole of the points just named, and remembering the increased yield by reason of hand tillage, and the greater value of some of the products in consequence of home consumption, it might be estimated that the value of the returns for the year would not be less than £5400. The expenses might be £900 for rent and tithes, £200 for horse labour, and £1100 for management, seed, purchased manure, and incidental expenses, or a total of £2200 without hand labour. This would leave £3200 for the latter purpose; a sum sufficient to provide food for 200 men at a cost of £16 a year each.

But allowing the proportionate area, as before-named, viz. six acres for each man, the whole of the cultivation work of such a farm could be managed by 100 efficient labourers. In having so large a number, even though they have been tested and trained, it would be safer to estimate that some would be incompetent, and therefore 120 should be allowed. But even if this number were required for the cultural operations, not only would the produce be sufficient to supply them with food, but would also provide for a further 80 men, who could be solely employed in preliminary training, land reclamation work, building operations, or various industries. If the number of men were not kept up

to the full nett return from the farm, some fund in the nature of a reserve would be formed, which would be useful in the future. As soon as this principle of working was appreciated, and the number of men regulated with sufficient forethought accordingly, a loss on such a farm would be impossible. The clothing of the men and other expenses of maintenance will be provided out of that time not available for work on the land, as will hereafter be mentioned.

Some will say, how is it that from the produce of such a farm, support for the labourers can be found, when at the present time tenant farmers find it so difficult to make a living? With reference to this point, it must be remembered that the farm would have several advantages which the ordinary farmer would not possess. A great part of the land would be given up for growing vegetables for home consumption, making a large return from the area used for such purpose; much of the other produce would be consumed upon the property, the farm being thus credited with the wholesale price, without any risks of sale, marketing expenses, or middleman's profits; while cultivation by hand would give far more than the average yield, for the reasons explained on page 53, as well as leaving the land in better condition. Another advantage of so much hand labour being available is that certain products might be converted into partly manufactured articles, with additional profits, while some crops such as flax might be grown, which can only be profitable when there is cheap labour available for their treatment. If a tenant farmer were cultivating such a farm as just named, his expenses for horse and manual labour on a high system of farming might be put at £1800, which, with rent, rates, and general farm expenses, as before assumed, would make a total expenditure of £3800.

A value of £4200 would be a good yield from such a farm, and would give a profit of £400 to the tenant in return for his skill and interest on capital. The difference between this return and the one estimated from the training farm as before mentioned, would be owing to the reasons already given.

It must not be overlooked that hand cultivation under the system suggested would be cheaper than if it were carried out by men receiving ordinary wages. Each man on the training farm would be nearly as efficient at the work upon which he would be employed as a labourer, though his cost would be about one-half the wages of the latter. If we apply this to the example already given, it will be seen that the cost of the 120 men necessary to cultivate the 600 acres would be under £2000 per annum. It would require at least eighty competent labourers to do the same work which, at 15s. per week each, would amount to £3100 per annum. This sum, it will be noticed, is £1300 in excess of the estimated expenses for horse and manual labour named on previous page, clearly showing that hand cultivation cannot be practised under ordinary conditions.

As soon as possession of the property was obtained, capital expenditure would be necessary in addition to the purchase of the farm. This would be for buildings for housing the men ; for workshops to carry on the industries which will be hereafter named ; for the maintenance of men and other costs of the work necessary on the rough land, until the cultivated portion would yield a sufficient return to support those engaged upon that work ; and lastly, for the farming capital requisite for working the cultivated area. The amount required for these purposes will be mentioned in Chapter IX.

Work and qualifications of men.—Having thus noticed the financial aspect of such a farm, we will now consider the conditions in relation to the men. Only two qualifications need be insisted upon for any man who wishes to come upon the farm until the total number received has reached the limit determined in the manner before-named. These two qualifications must be inability to get other work, and willingness to give his labour in any capacity upon the farm in exchange for his food and lodging. As soon as sufficient shelter had been erected, these men could be received and employed on the uncultivated part of the land, or upon the buildings.

If a man who had been upon the farm for not less than one month decided that he would wish to remain with the view of ultimately being established upon the land, and his work had shown he would be fit for such work, he would be assisted to gain that object by being provided with employment on the cultivated portion of the farm.

Such men would first be mainly employed in digging, or other work in which they would be most likely to gain the best experience for working cultivated land. Then in the first autumn after possession of the farm had been obtained, the change in the system of cultivation could be made. Horse labour would be stopped as far as possible, substituting at first a steam-digger. The manual labour would then be used to assist the auxiliary operations, and the men would gain increased proficiency, the number being increased until gradually even the assistance of steam, except in originally breaking up the land, would be unnecessary. While thus engaged in the general cultivation work of the farm, the men would receive instruction in the various details of farm management by means of hearing evening lectures, attending

demonstrations, preparing food for live stock, dealing with products of same, competing between each other in digging, hoeing, draining, and other agricultural operations, and in various other ways. The details of the training would depend upon the wishes of the men themselves as to their future. Some might desire to have a small holding in this country; some to become labourers upon a co-operative or communal estate; some to be established upon land abroad; some to become independent emigrants; while some might be satisfied to take the risks of ordinary wage-earners, as gardeners, or in some other department of landed work. Men wishing for any of these positions would have time and opportunities to acquire the knowledge necessary, as well as giving their work to the maintenance of the farm. The period for which each man should remain would depend upon his own ability and the position to which he desired to attain.

But the mere residence, for a few months, upon such a property, of a man claiming to be competent to occupy a position on the land, ought not to be accepted as proving that competency, until he had undergone some practical examination and test. If he were to be an emigrant, this might be of the nature referred to in Chapter VIII. The knowledge for a small holder would be less varied, but in much more detail.

The examinations although necessary to complete the training farm need not be solely for those who have been upon the latter. Any persons might offer themselves for examination. Thus, certificates granted for competency in the various departments of home work would be useful, not only to intending small holders, but also to those lads now growing up in our villages, who by this means might

obtain situations as expert horticulturists, market gardeners, or skilled workers in some department of farm work, instead of coming to our towns to seek employment there.

This technical training and the consequent examinations would be a source of expense which could not be met from the returns of the farm. The amount thus expended should, however, be obtainable in various ways. The expenses of special instruction and testing the capability of those who wished for certificates of competency as emigrants, might be paid either by the Colonial Governments benefited, or by any Emigration Society interested in their welfare. Such an examination of a practical and independent character would be of much use to any Government granting nominated passages to suitable emigrants, or adopting the principles sanctioned by the British Columbia Loan Act, 1892. If such a system had been in force, schemes of colonization which have failed, through unsatisfactory colonists, might have succeeded, and passage-money paid by Emigration Societies for unsuitable emigrants would have been saved. The expenses of technical instruction and testing capability for home work would be met from grants under the control of County Councils, or by special grant from the Agricultural Department. The establishment of efficient small holders and increased knowledge among our rural labourers must surely be of sufficient national importance to justify this assistance being given.

We have now seen the manner in which those men who wish to obtain a living from the land could acquire the necessary experience, and be tested as to their capability. But the possession of some money is necessary in addition to skill. Not only should each man have some amount at the end of his training, but during the time upon which he was

on the farm, he would require to pay for clothing and small personal expenses. In order to supply the needed funds, various industries should be introduced upon the farm, the whole of the returns from which, after meeting the expenses of management, would belong to the men themselves.

Instruction in rural industries.—On reference to the commencement of Chapter IV. it will be noticed it was there estimated that probably fifty entire days each winter could not be profitably used in outdoor cultivation work. During the remainder of the year there might be almost as many days when cultivation work was not necessary; while the short days of winter would allow many hours during the ordinary working time to be available for indoor work. This time, when men would not be employed on the land, has been taken into consideration in fixing the number required for the cultivation work. Taking the whole year, the time not wanted on the land would probably be about one-third the ordinary working time of each man. This is the time during which each resident would be able to earn something for himself. With the number of men who, it is suggested, might be on the training farm, it would be comparatively easy to organize trades of which the proceeds would be remunerative. Each man would have to adopt one of these trades, the one selected being dependent upon his experience and previous knowledge.

For such a community there would be tailoring, repairing, making clothes, and various departments of house work, for those who had been accustomed to indoor labour. With the use of only small capital, many could be employed in carpentry, cabinet-making, upholstery for their future homes, joinery, and other working in wood, if they had knowledge in any of these departments, or aptitude in the use of tools.

The making of Musical instruments, ornamental Metal-work, Carving, Designing, Fret-work, Painting, Modelling, wood and bone Turning, and other remunerative work, might be done by those who had special artistic or other gifts. Each of these are occupations which could be carried on at uncertain intervals, and the experience which the writer has of unskilled labourers, shows that in many cases they possess undeveloped tastes in certain of these directions. With some guidance, and helped by a small loan of money, these could be developed, to at least a sufficient extent to profitably employ the spare time of all having such gifts. The development of such individual talents among those unemployed seeking the assistance of the organization for helping the destitute in Berlin, is what has rendered it so great a success. The help the men obtained in developing these powers, would be a source of continual profit to them in the future.

Then there are those industries arising from the produce of the farm, such as Milling, cleaning Seed for market, curing Bacon, Pickling, preserving Fruit or Vegetables, carrying on Dairy and other Farm Factories, making of Baskets from osiers that are grown, or working up Flax from the straw to yarn. This last could be arranged so as to employ much intermittent and entirely unskilled labour in the winter. The experiments which the writer has carried out in the growth of this crop show it to be specially remunerative, if it can be produced in a sufficient quantity to work up the straw efficiently. Under certain conditions the making of Beet-root Sugar would be found profitable. The introduction of a variety of Beet which will succeed in this country, and develop here at least 10 per cent. of Saccharine ; and the invention of a process of making sugar by

which the pulp of the roots after the sugar is extracted can be used for feeding stock, now renders this industry remunerative in England, wherever a sufficient area can be grown, and hand labour is available for its treatment. Pith, Rush, and Esparto grass manufactures can also be profitable. The first is a waste product obtainable in large quantities, and can by hand labour be converted into ornamental work, for which there is a demand at high prices. A variety of the last-named can be successfully grown in this country, and will yield a large profit on manufacture, without competing with any existing English product.

Straw-plaiting, Silk-winding, coarse Weaving, and various simple descriptions of Textile work, now mainly carried on abroad, because of cheap labour there, and involving little skill or capital, could be introduced mainly for those who were not capable of continuous outdoor work. Before commencing any such class of labour, it would only be necessary to have a short test to prove whether a man with little experience could produce work of a value of 9s. in a full week, at the description of labour it was intended to introduce. This amount would be sufficient to pay for his maintenance, and give him an amount of about 2s. 6d. per week.

Then manufactures might be introduced of that kind which would utilize the natural position or advantages of the property. Thus, in the selection of the estate, its desirability for burning bricks, making cement, opening a stone quarry, or work of a similar nature, should be considered. If there are no such natural advantages to be utilized, then the products to be manufactured should be of the nature of patented articles, or of a character not now produced in this country, or of a kind which would make use of the

otherwise waste materials coming to the farm. To produce articles already made by hand labour at home would injure those now employed in producing them; while to compete in price with those having large capital and machinery would be impossible. These employments would mainly be for men not working on farm and for winter months.

In the summer, the men should make some profits either by cultivating an allotment for their own benefit, or by taking piece-work. In the former case, a man might be allowed to rent a small area, the produce being purchasable from him; and he might perhaps further have the profit arising from a goat lent to him, with rough grazing for its maintenance. To obtain remuneration for overtime, a certain definite amount of work could be fixed as the average expected from each man in return for his maintenance, and at harvest and at other times the excess done over that quantity would be paid for as piece-work. Some of the men might receive a weekly grant if occupying a responsible position, or taking special duties; this to be paid out of the funds set aside for management expenses.

As to the amount which a man could earn in these various ways, we have seen that the hours not occupied upon the land would probably average one-third of the ordinary working time. The whole of the proceeds of this would be for his own benefit. Any man of good ability who worked well, and used fully this period in some of the directions indicated, should certainly be able to earn £2 per month. This sum would give a total value to his labour of under 18s. per week. Though few coming upon the farm would possess technical knowledge, yet with the advantages afforded by the variety of Industrial Operations carried on; with the assistance from the Industrial Superintendent who

would have to give attention to every individual man ; and with the further help of comrades ; it should not require a man of exceptional powers to give work to that value. The majority would not save at so rapid a rate, though from experience of qualifications shown by men at Hadleigh Colony, it apparently would be rare for any man of satisfactory character, if skilfully directed, not to be able to make at least £1 per month for himself, after giving sufficient labour to pay for the cost of his maintenance. The greater part of the amount earned should not be paid in cash, but retained, and credited to the man, to be paid to him only when he left the farm. Any man desirous of being established upon an independent holding at the earliest possible date, could be assisted in this object as soon as he had a sum of not less than £5. The method in which this could be done will be suggested in the next chapter.

Dealing with men of dependent character.—Before taking into consideration the question of settlement of the men on the land, it is necessary to see what should be done with those who, at the end of the first month, expressed their intention of not wishing to be established on the land, or who did not possess those powers necessary for them to achieve success in this way. Such men could not be kept upon the farm for more than three months, even if they did sufficient work to pay for their maintenance. Although it might seem harsh treatment to dismiss all who, owing to their faults, misfortune, or physical weakness, had proved incapable of making their living from the land in the future, yet it must be remembered that such men, proving incapable for farm work, even if they were discharged, would be in no worse position than if the farm had not been in existence. There would no doubt be many upon the farm willing to

live permanently a life of dependence, thus occupying a place which should only be open to those who wish to be established upon the land. On the Hadleigh Colony there was a large proportion of these men concerning whom the writer expressed the following opinion in a printed article, describing their character when they arrived upon the Colony :—

“The greater number of the men are those who are well-conducted, who perform satisfactorily all the work given them to do, but who have no ambition, no desire for the future, and no persons dependent upon them. These, though they perform willingly the work given them on the Colony, even if their work would be worth a few shillings a week more outside, would yet prefer to remain where, as long as they work and are of good behaviour, they are provided for without difficulty on their part, and are free from the temptations of ordinary life and the risks of temporarily getting out of employment.”

There are various ways in which this class could be reduced to the smallest dimensions. The fact that no money would be paid upon the training farm, unless it was earned by exercise of independent brain power, would develop talents on the part of some, while those whom it did not so affect, and who found they had not the abilities or the working powers necessary for getting some money payment, would get dissatisfied and leave. Then if, within two or three months of entry upon the farm, either the man himself or the superintendent considered he was not likely to be able to obtain a permanent living from the land, and he had done his work on the farm faithfully, thus proving himself worthy of help, he should be advised as to the next best course to take, and be assisted to carry it out. It

must be remembered that all such men would have been for some weeks under special supervision, and have proved their character and steadiness. The outdoor work would probably have effected great improvement in their health, they would have been tested in hard physical toil, and have gained some experience in an indoor industry. In these ways they would have advantages in getting employment which they did not possess when they came upon the farm. With this experience and some forethought and consideration on the part of the superintendent, it would be indeed strange if some suitable situation could not be procured for each one of this class.

The question of married men will be noticed in the next chapter. A man can be much more successfully established upon an independent holding if he has a suitable wife. In the case of a man who is married when entering the training farm, some independent arrangement must be made for the maintenance of his wife for the period for which he remains.

Summary.—To sum up the recommendations of this chapter, it is suggested that if a practical attempt is to be made to get men back to the land in order to get a living therefrom, it is necessary to train them in agricultural work. It is shown how this can be done by receiving the men upon a self-supporting training farm. Any who do not thereon show themselves competent must leave, having been temporarily assisted, or having had permanent situations secured for them. Any who think themselves competent may present themselves for a practical examination, the nature of which would depend upon the position which they wished to occupy in the future. On passing such test, and on saving a sufficient amount from proceeds of overtime or

industrial work, as might be found necessary, a man could then be assisted to become tenant of a farm on a home settlement, to obtain a position as a co-operative labourer, or to purchase a farm in a foreign colony. These various methods of obtaining an independent living will be referred to in the three next chapters.

This plan may be thought a slow method for effecting the object in view, but it appears to be the only one financially sound and practicable. It must be remembered that if shown to be a success, there will be many centres formed where by this plan men can be maintained without cost, with benefit to themselves in the present, and with prospects of being permanently established in the near future.

These proposals are based upon the results of actual experience, and after most careful investigation into work now in operation elsewhere for the same general object. Only that which has proved successful has been herein suggested. The Dutch Colonies have proved that it is possible to train unskilled men to be capable settlers, though they have not succeeded in giving those settlers a comfortable living because of the unsuitable conditions under which they are placed for that purpose. The Labour Colonies of Germany have shown that profitable work can be obtained from the unskilled, and that such work on land has materially relieved the poor-rates, as well as in ten years having enabled 22,000 men to get permanent situations again. Hand labour upon land has been shown to be successful in numerous cases. Surely therefore it is worth while to try some such work in England, which under the principle herein suggested will need no annual sum for its support, and may produce useful results.

As to the ultimate independent life of those coming on

the training farm, when we see the small Irish farmer and the Swiss and French peasant making their living from the land with less advantages than can be offered in this country, we ought practically to be able to show a way in which the conditions to ensure success can be here obtained. Then with so many millions of acres in "Greater Britain" awaiting the cultivation of men who are almost starving here, but cannot go abroad for want of skill and passage-money, should not we attempt to do something practical to help them towards obtaining these two necessities? Should we not also have some means of giving work to those temporarily out of employment in the place of forcing them to become beggars or casual tramps? The proposals in this chapter constitute the preliminary step to meet all these views.

The work, if it is to be carried out, must be self-supporting, and independent of the assistance of the charitable. This has been the main idea in the mind of the writer. Had not this self-supporting basis been a necessity, even to the extent of paying an interest on all capital required, much simpler proposals of a theoretical nature might have been propounded. The plan however suggested herein is one that can be carried out without loss; though the results expected are not so great as might be pictured by an unpractical philanthropist carried away by his own enthusiasm, and being either unacquainted with, or ignoring the difficulties of the work.

The capital required; how it will be secured; the rate of interest it may be expected to return; and the best method of general control, will be suggested in Chapter IX.

CHAPTER VI.

HOME SETTLEMENT.

MEN having been found who have proved they possess the necessary skill, and who have sufficient confidence in their own powers to risk the whole of their savings in working the land, the next thing to decide is the manner in which they can best be helped to obtain an independent living. The majority will no doubt prefer to have an independent cottage and land at an early date either at home or abroad. The reasons why some would prefer to be abroad are noticed in Chapter VIII. In the absence of those reasons, and for men not possessing the special energy and qualifications necessary for success in a foreign colony, settlement on land at home should be the plan to be adopted. It is evident that capital will be necessary, and this must be provided by an Association who will, either by purchase, lease, or other means, acquire the land upon which the settlement is to be effected, and who will also provide all other capital necessary, the interest on this outlay and expenses of management being provided out of the produce of the undertaking.

New settlers to be started on one property.—Having regard to the fact that the greater part of the money invested will not be the property of the settlers, it is

necessary that careful supervision should be exercised. This being the case, the men should not be established upon isolated small holdings, but upon one property sufficiently large to be subdivided for not less than twenty or thirty tenants, and to be under the control of a superintendent. This course is also desirable in order that those helped can have the advantages of skilled advice and assistance, co-operation among themselves in harvesting and marketing produce, and the use of factory and other buildings that could be erected for joint use, which would so much help in giving increased profits. The qualities which the land must possess have already been noticed in Chapter IV. A property possessing these qualities would not be so difficult to find as an estate with the variety of soil and special characteristics required for the training farm. Nor would the area be of much importance, provided that the farm for each settlement comprised not less than two hundred acres of arable land. It may be safely stated that there are many farms for sale in every county of England which possess the qualities that are necessary.

The method adopted in laying out the property must depend upon the situation of the roads and the area of grass. The grass land would be best retained in the hands of the Association promoting the scheme, the grazing then being separately let to the tenants requiring it, and hay being made from such portions as were reserved for that purpose. The whole of the arable land would be divided into farms of from five to seven acres each, with a few of larger area to be worked by three companions. If the whole estate were in one block of arable land, it would be necessary to make roads, and lay down near the centre of the block an area of grass for common grazing, and for the purposes of a Village

Green. Several of the cottages should then be situated fronting this green, and the general farm and factory buildings should be erected upon the same.

The farm-house would have to be altered and probably enlarged so as to accommodate fifteen or twenty inmates, and on a few of the Allotment Farms cottages would be erected. The latter would only be for those who were prepared to furnish their cottages, and also to find the greater part of the working capital necessary for their respective holdings. On no other conditions would it be safe to allow the independent tenancy of a cottage.

The farm-house would be for those men who had the necessary experience; had satisfactorily shown their capabilities; and who had a sum of not less than £5. Any man on depositing at least this last-named amount, would become a resident in the house, and would be accepted as a tenant of one of the Allotment Farms, upon which no cottage was erected, having in addition half an acre of garden-ground near the farm-house. The amount deposited by the tenant would be placed to his credit, and he would be entitled to purchase from the Association live stock, implements, seeds, &c., to the value of three times the amount deposited. The tenant would then be debited by the Association with the cost of the goods so supplied.

The rent of each holding payable by the tenant would first be fixed. The best means for ascertaining the amount to be charged would be to calculate 4 per cent. interest upon the cost price of the property, including cost of erection and alterations to buildings, and then adding to this sum the probable annual amount of rates, tithe rent charge, and other outgoings, with possibly a further sum of 5s. per acre each year towards the cost of management. These sums

together would make a total annual charge upon the property ; and dividing this by the number of acres to be let to the tenants, an average amount per acre would be ascertained which would be chargeable to the tenants. Every farm would then be separately considered and assessed, depending upon whether there were any reasons for departing from that average. The addition of the 5s. per acre, together with the grass land, would be sufficient to provide for the cost of management, or if there were a substantial area of grass, this alone might be sufficient to cover the cost. In any case the rent so assessed would be far below the average generally charged for small farms, while it would secure interest on the capital invested in the land and buildings.

Such stock as the tenant had acquired would be kept in the general farm-buildings. His system of farming would have to be approved by the superintendent ; and the Association controlling the Colony would purchase his produce at the same price at which they could realize the same. The price so ascertained would be credited to the tenant, and after harvest, in addition to any amount then standing to his debit, with $7\frac{1}{2}$ per cent. interest thereon, he would be charged with the rent of the land ; all seeds, manure, and other articles which had been supplied for his farm ; and lastly, with the cost of his maintenance at the farm-house. It is possible that during the first year the returns from the holding would be sufficient to discharge the debt due by the tenant to the Association. If not, the balance against the tenant would be carried over to the following year, and in that way would be gradually extinguished, the tenant so becoming absolute owner of the stock on his holding. In addition to the returns from the cultivation of his farm, the tenant might take any casual outside work which he was

able to do, and also probably make some income from indoor industries. The whole of his time would be solely his own to do whatever he wished, provided only that he kept his farm in a good condition to the approval of the superintendent.

Compared with establishment in a cottage, this system would certainly give the best chances of success to a tenant. He would have the advice of the superintendent to rely upon; no risks or loss of time as to sale of produce; an opportunity of trying his skill at independent farming, without having to find the whole of the capital; and would obtain his maintenance at the cheapest possible cost. If he worked his land successfully, and besides had employed his time fully and profitably, he could certainly at the end of the year have in stock or money at least £20 in excess of the sum he originally deposited.

If the tenant did not work his holding in a proper manner, his tenancy would be terminated, and he would be dismissed from the Settlement after necessary notice and warnings. In such case the Association would not make a loss, for no sum would have been expended except for assets on the farm, of which the Association would then take possession. Whether on such determination of a tenancy the labour of the discharged tenant should be taken as equal to the cost of his maintenance, would depend upon the circumstances of the case. In certain instances it is not impossible that he would not only receive back his deposit, but also some payment added to it for the value of his labour in excess of the cost of his maintenance. When, however, his work had been insufficient, he might be charged with some part of this cost. In any case, the holding by the Association of the deposit previously named, would be necessary to show that the tenant does wish to be established independently, and

also as a security against loss, negligence, misconduct, or wilful damage.

Conditions on which cottages can be supplied.—To establish a man without capital in an independent cottage would be speculative for any Association, and require large capital. A man, however, who had worked sufficiently well upon the training farm to pay for his maintenance, and to be able to save something during that period ; who had passed a satisfactory practical examination ; who had then risked his savings in working one of the allotment farms ; and who, for at least some months, had worked the same under supervision with successful results, would be a man who could be trusted to make a livelihood from the land. He could therefore be safely assisted to take a cottage, and thus not only secure an independent life for himself, but also for others who may be dependent upon him.

When a tenant living in the farm-house had reaped at least one harvest since he had been there, he could apply either for a cottage to be erected upon his holding, or to have some allotment farm with a cottage already upon it. Before his application was granted, he should be required to show that he was in a position to benefit by having a cottage, and to assist others by reason of its occupancy. These conditions might be considered to be complied with—(1) If he were married. (2) If he had any relatives whom he wished to support, one of them being a woman qualified to undertake the care of the house, and to do the other work usually falling to the wife of a cottager ; or (3) If three companions wished to join in taking an allotment farm together.

With reference to the first-named of these conditions, hitherto we have considered the men as being unmarried.

Such would be the case with the majority of those whom it is proposed to assist. Some concerned in helping the unemployed are surprised to find that so large a proportion of men claim to be single; and consider that the majority of those who represent themselves to be single, are in fact married; but this does not appear to be the case. It would seem that there are several reasons for finding so large a proportion of single men among the unemployed. In the first place, a man with a wife is more likely to be persistent in his efforts and steady in his purpose to get work, instead of readily falling into a dependent mode of life, and relying on casual earnings. In the second place, if a man with a hard-working and devoted wife, through fault or misfortune does lose his regular work, she can most frequently manage to keep the home together until he has secured work again. In the third place, some would be men who have, preparatory to marriage, spent years in learning a trade for which the demand began to cease at about the time when they became fully qualified; and have thus never been in a position to marry, and cannot now secure employment of that kind in which they have skill. Lastly, there are those who have been in the army, or similar occupations, during which time they were unable to have a wife, and since their income ceased from the only employment in which they had experience, their earnings as unskilled labourers have been too intermittent to allow of marriage.

Many of the men however are married. In such cases the wife is generally living with relatives, and in rare cases in the Union. Sometimes the separation has been desired from both sides, and in a few instances the break-up of the home has been owing in some measure to the conduct of

the wife. In the majority of cases, however, the separation has been due to the inability of the man to maintain the home. At least in these instances a return to an independent position will be gladly welcomed by both parties, and the cottage should be allowed at the earliest possible date.

When a man also has relatives whom he wishes to support, a cottage should be allowed as soon as possible. Some men of the class whom it is desired to help have joined the ranks of the unemployed through the death of their wives, the break-up of their homes having mainly arisen from this cause. In these cases there may be young children whom the man would like to provide for as soon as possible, or other relatives whom he could materially assist by acquiring a home, and who in return for that assistance would aid him in the work of the farm, thereby increasing its profits.

But the greater number of the cottages would in the first place be taken by three single men. While living in the farm-house men would find others of congenial tastes, and three might agree together to apply for a cottage, with an area equal to three of the ordinary farms. The union of the three would enable the work to be done in better time; the returns from the farm would be of a more regular character; each man would be able to take that class of work for which he was best suited; the produce could be more conveniently realized, being in larger quantities; the men would be able to take more useful industrial employment; and they would require less working capital to be loaned to them than if working three separate farms.

On application therefore by any of these three classes a cottage should be allowed; conditional upon sufficient

furniture, and at least one-half the necessary working capital of the holding, being found by the tenant or tenants. This should not present much difficulty, for every man in the farm-house after his first harvest would probably possess money or stock to the value of £20 to £30.

When arrangements were completed for a holding with a cottage, the special arrangement made when entering the farm-house would be cancelled, and an ordinary agreement of tenancy entered into, containing usual conditions to secure good cultivation and payment of rent. Some charge upon the farm-stock would have to be given for the amount lent towards the purchase of the same. Except for this, the tenants would be in the same position as any independent farm-tenant; but being upon the Settlement they would have many special advantages which no ordinary small tenant would possess. These would comprise a good cottage, piggeries and poultry-house; lower rent than the average; the use of farm-buildings with every arrangement for economy in feeding; factories available for getting increased profits from produce; assistance in realization of same; and facilities for obtaining at a wholesale price the requisites for working the farm.

Having in this way established a tenant, the loan made towards the purchase of the farm-stock would probably be paid off at an early date. Many have suggested that such a tenant might also be helped to become a purchaser of his farm. This seems to be undesirable. As already mentioned in Chapter I., a tenant can use his capital more profitably than by expending the same in the purchase of the holding upon which he works. As soon as the tenant of one of the Settlement farms has paid off his loan, it would be better for him to become tenant of a farm with a larger

area, upon which the judicious employment of his capital would result in larger profits and increased comfort. His removal, therefore, from the Settlement as soon as he was in a position to succeed without borrowed capital would be desirable, so that the Settlement could be used to assist the establishment of others wanting special help.

Buildings for co-operative use.—A Cow-house and Dairy would have to be erected for the general use of the tenants upon the Settlement. The Cow-house should contain separate lock-up stalls for single cows, the number provided for being dependent upon the size of the Settlement. Adjoining it would be the food-preparing room, fitted with a Chaff-cutter, Cake-crusher, Root-pulper, and Gritting-mill ; with a Boiler and arrangements for mixing or steaming chaff or other food. Next to this feeding-room would be the food-stores, divided by partitions into separate compartments, each tenant having the key of the one allotted to him. Then, easily accessible from the cow-house, but separated from it and constructed with double walls and the other ventilating arrangements desirable, would be the Dairy Buildings. These should include Churn-room, Butter-making room, and Stores, with proper arrangements for washing and storing of Utensils. The Churn-room should be fitted with Churn and Butter-worker for general use, while each tenant would have his separate cream-pans and milk utensils ; double shelving at least six feet in length being allotted to each one for that purpose. The Butter-making room would be fitted for general work, and by each tenant having a fixed time for its use, no confusion need be caused by this arrangement. Such Dairy Buildings would be preferable to the erection of a Cow-shed on each farm. The capital expenditure would be less ; the arrangements for feeding

the cows would be economical; the milk would be more readily kept; and butter made up for sale in a better form. These advantages might make a difference of as much as £3 to £4 in the value of the yield from each cow in the course of the year. This plan would have the further great advantage of rendering it possible for the Association to purchase the cream and make the butter in large quantities, thus saving the tenant's labour and risk of inferior quality through negligence or inexperience.

The erection of Factory Buildings would be even more important in obtaining satisfactory financial results. These would consist of a Slaughter-house, in which pigs and other stock would be killed, with room adjoining fitted with the necessary appliances for preserving and salting meat and making bacon. A milling-room should be provided for grinding barley and other meal for feeding and fattening the stock, which room should also be fitted with the machinery necessary for producing flour. The same winnowing and other machinery would be useful for cleaning and preparing seed-corn. Then there should be a Shed fitted with an Evaporator, and a Boiling-room attached containing all the necessary appliances for preserving Vegetables and Fruit in a variety of ways.

Advantages of farm factories.—The advantages of these respective Buildings should be noticed. The Bacon Factory would allow of the Association at any time purchasing pigs reared and fattened by the tenants, if the latter were unable or did not wish to use the arrangements provided to kill and cure bacon for themselves. In any case by thus taking the profits of the bacon-curer, an extra price of $\frac{1}{2}d.$ to $1d.$ per lb. would be obtained by the tenant as well as a certain market. This is a most material advantage when it is

remembered to what a large extent any small tenant is dependent upon his pigs.

The Milling and Seed-room would also be of great use. The cultivation by hand would render the property especially suitable for growth and preparation of Seed-corn and other seeds for market, which if grown successfully would pay better than any other form of cultivation. It must be remembered that Home-grown wheat would be more profitably converted into flour by the admixture of dry foreign wheat, and therefore to secure a better profit to the grower it would be well for him to sell the best home-grown samples for seed, and convert the inferior into flour, with the admixture of such foreign wheat as might be necessary. The fact that some of the corn grown might be sold for seed would be an inducement to the tenants to grow clean and carefully cultivated crops.

With reference to Vegetables and Fruit, all acquainted with large gardens know the great waste that there generally is in the summer months; whereas, with care and forethought, provision could be made for vegetables now wasted, to be used throughout the year. Thus Vegetable Marrows can be pulped or dried; Beans and Scarlet-runners pressed and salted; and the moisture from green Peas and other vegetables evaporated. Ripe fruit, which is too frequently allowed to rot on the trees, or is sold at a price which does not cover the cost of picking, might be preserved. Some cottagers do make jam, but this is an uncertain and expensive method. There are far more profitable ways of using fruit. Drying with a properly constructed Fruit Evaporator is probably the best. Foreign fruit so treated finds a ready sale, and our home-grown fruit in many cases produces a better product. Then bottling is a process which keeps the

fruit in a far more useful and saleable form than as jam, and returns sometimes double the price. Dry preserving in a cool oven is also finding extensive support, and with some fruit produces a better result than bottling. For fruit syrup and for fruit-pulp there is also some demand. Thus these Factory Buildings should be fitted not only with boilers and appliances for making jam, but also with appliances for preserving in all these other different ways. If the quantity of fruit grown were not sufficiently large for market, these arrangements would certainly be useful for the tenants in enabling them to preserve their fruit and vegetables for their own consumption.

With the exception of the joint cow-house, dairy, and farm factories, no new buildings need be erected. The old farm-buildings will, however, be fully used, and possibly might require some extension. Accommodation will be wanted for the horses necessary for carting, and also for working the farm until all the Allotment Farms are tenanted. Sheds and buildings for implements and for storage will also be required. The articles stored will consist of manure, feeding-stuffs, and seeds of the character most suitable for the tenant's requirements. These will be retailed at the wholesale cost price, with the addition of the expenses of obtaining the same from merchants or manufacturers. The hay, straw, and any other produce purchased from the tenants will have to be collected at the farm-buildings, and there remain until repurchased by other tenants or sold to some outside buyer.

Management of Settlement.—The management of such a Settlement will neither be difficult nor expensive when once organized. The term of superintendent has been applied to the chief officer, but it would not be necessary for

him to be resident. A visit once a week or fortnight would be sufficient from him, if the Association owning the Settlement had but a small area of land in hand. The only resident management staff need be a farm-bailiff and a store-keeper. The former would be responsible for working, by the ordinary method, such land as was in hand ; for advising the tenants on any matters of farming upon which they thought his opinion would be of assistance ; for seeing daily that the dairy and farm-buildings were in proper order ; and for advising the store-keeper generally as to whether any stores applied for by any tenant appeared reasonable. He and his wife might be responsible for the management and catering at the farm-house, with such assistance as they required. The store-keeper would have to be in attendance at specific times upon the farm to issue stores or other articles required by the tenants ; to keep a record of all the work done in the factory buildings ; and to carry out the instructions of the superintendent as to any articles to be purchased or allowed to the tenants. The finance in relation to the position of each tenant would have to be under the control of the superintendent.

Such is a practical scheme for a self-supporting Farm Settlement. It may be said that but few men of the class for whom it is intended would pass through the various tests, and the long training necessary, before reaching an independent position. This is true. But when the number of those wanting employment is considered, there can be no doubt that the comparatively few whom it would again restore to independency without displacing other labour, will probably be as many as can be assisted with the capital provided. Moreover, it must be remembered that the majority of those who drop out at the various progressive

stages will have received training which may be useful. They would further have had work which at least for some period would have prevented them from becoming paupers, or beggars, either of which events might have happened without that assistance.

Suggested method desirable for landowners.— The system of small holdings as herein suggested is to some extent a safe method to be adopted by landowners. If this be appreciated, there will be a comparatively rapid increase in the development of intensive cultivation, and in the number of small holdings. In Chapter III. we have seen that five or six acres of arable land worked mainly by hand tillage can under certain conditions be made to afford a comfortable maintenance. In this chapter suggestions have been made, first as to the way in which tenants having the necessary skill might be assisted with sufficient capital; and secondly, as to the manner in which several tenants could be established upon one Settlement so as to secure their individual success. It would be undesirable for a landowner to undertake the loan of capital to tenants, but the plan of settlement of men upon his land as suggested herein is possible, provided the settlers are men possessing capital as well as skill. This plan, which will be referred to in Chapter X., would, if adopted, ensure success to the tenantry, a safe income to the landowner, and increase the productive powers of the land.

CHAPTER VII.

CO-OPERATIVE AGRICULTURE.

SOME persons hold the opinion that a larger number could be interested in the land, and obtain a better maintenance therefrom, if some arrangement could be adopted by which the labourer would obtain a share of the profits. Some consideration should therefore be given to whether any scheme with this object can be successfully put into operation.

Co-operation as applied to the cultivation of land has been attempted to be carried out in various ways. These may be considered to have been of three kinds. The first, and most complete way, has been the combination of labourers to work a farm in order to secure maintenance for themselves as a community, and dividing, in some manner agreed upon, any surplus profits made. A second form of co-operation consists of the combination of persons possessing various sums of capital into a co-operative association, to work a farm in the same manner as an ordinary tenant, with a division of profits among the co-operators. Thirdly, co-operation in a more limited sense has been tried by the owner, or tenant-farmer, giving some part of his profit to those labourers who have assisted in producing the same.

These respective plans will be discussed in this chapter under the headings of Communal Farming; Co-operative Tenancy; and Profit-Sharing. Not only have these plans of co-operative agriculture been actually in operation, but within the present year suggestions have been made for founding a colony on the principal of co-operative ownership. We shall, therefore, also consider whether this would be practical.

Communal farming.—To carry out this system, proposals have been made that large areas should be acquired, and in place of assisting labourers to start as small holders, it is suggested that they should work upon these farms on equal terms for the support and profit of the community. We will consider the advantages claimed for this system, provided that the necessary capital be found. There is certainly more economy of manual labour than if the same men were giving their work to independent small areas. A large farm can be worked by improved machinery; there is less waste by roads or buildings; repairs and maintenance in proportion to capital would be much less; horse labour can be economized; food for live stock would be purchaseable on better terms; more profitable systems of cropping, which would not be possible on small holdings, could be introduced; and the annual profits would be rendered more certain by having a greater variety of produce to depend upon. The yield, however, of a large farm is not so much per acre as on a small area cultivated by spade husbandry, where so much more care can be given to the growing and cultivation of the crops by the person interested and dependent upon their success or failure.

Some persons think that in the case of a Communal farm each man would be interested in its success, and would give

the same care as if working independently for himself; and it is, therefore, claimed that by forming a co-operative farm on this basis it might be possible to obtain the advantages of both the large farm and small holding with considerably less capital than would be necessary for the latter purpose.

The system has been tried on various occasions in different countries, the one that is best known here being the experiment made on an estate at Ralahine, in Ireland, sixty years ago. The estate named was situated near Limerick, and consisted of 616 acres of land, of which 268 were arable, 63 bog, and the remainder grass. In 1831, the owner, Mr. Vandeleur, formed this into a co-operative farm, and 28 labourers, with those dependent upon them, commenced work upon the Communal system. In the following year this number was increased to 35 men, who, with women and children, made up the total to 81. For three years the movement continued, and then came to an unexpected end owing to the bankruptcy of Mr. Vandeleur. For the period during which the work lasted it was a success. The men, working under a committee, faithfully performed their duties; the produce was sufficient to pay the rent of the farm; the individuals forming the community were maintained in a far better condition than that in which they had previously lived; and the neighbourhood became contented instead of remaining a disturbed district. The Ralahine experiment having been successful, it is desirable to notice the special conditions under which it was tried; it will then be seen that a similar movement cannot now be carried out.

The property was exactly suited to the desired purposes. There was water-power available on the estate; a convenient proportion of pasture and arable land; good farm-buildings; peat for fuel; improvable land upon which unskilled labour

could be employed; and a landlord providing the whole of the implements and working capital. Taking into consideration that land reclamation and building were undertaken, the total number of men employed upon the property was not more than would ordinarily have been engaged. This being the case, there was at least a probability of obtaining a better profit than a tenant-farmer, for while the labourers were as skilled and not more numerous than those usual on a similar area, their work was likely to be more efficient by reason of the system introduced.

The satisfaction which arose on the part of those working upon the property was owing to their being maintained without uncertainty or difficulty. They had been accustomed to attempting to get a living from small plots, without proper buildings, worked without capital, and with none of the advantages which a small holder would now have for working the land or realizing his produce. The living thus made was so uncertain that the labourers and their families, accustomed to privations and cheap fare, were fully satisfied with the maintenance provided for them at Ralahine, which, it appears, cost only 1s. 3d. per week for each person, including food, lodgings, and fuel.

Such a system of Communal farming would not be satisfactory to the English agricultural labourer of the present day, because his condition is so much improved in comparison with a small holder in Ireland sixty years ago. A competent labourer can now get an average of 13s. to 16s. a week, in addition to the earnings of his wife and family, while near London and in certain other districts he would receive a larger sum. Those who through physical incapacity, idleness, old age, or other cause cannot get regular employment, might accept such openings as a

Communal farm would offer ; but all those having knowledge, energy, and good powers of work are now sought after, and could remain in situations at the wages mentioned if they would consent to continue as farm-labourers. In this latter case they would naturally prefer to work where it would be possible for them to retain independence, have some money to spend weekly upon themselves, and secure remuneration for their extra services when given. This could not be the case if working for mutual benefit as members of a community.

Nor would it be so satisfactory as a small farm to the man who, unable to get a living in other ways, had received such training as would enable him to get a maintenance from the land. As a small tenant he would obtain a large proportion of his maintenance from the waste products of his holding, utilized by his family in feeding stock, &c. This would cease on his continual employment as a labourer, perhaps at a distance from his cottage, as he would be unable to give sufficient help to his family. The latter would be much more likely to develop habits of industry, and keep their time fully employed upon home work, than if their labour in such departments were only used for the benefit of the community. If some of the time was their own, and some for the benefit of the community, it might be expected that the latter would suffer. If a man or his wife had special competency in any of the minor branches of farming ; or if the man had any special skill or working powers which would enable him to cultivate a larger area than usual, then he could get no sufficient reward for his extra ability or work, if a member of a community working on equal terms. No doubt, those on the farm would see that a share of work was done by

each worker ; but as a labourer on a Communal farm it would be difficult to arrange for a man unskilled in agricultural work, that weekly cash payment, the increasing nature of which, as a reward for his skill, would do so much to stimulate his energies and develop his full powers.

It might therefore be expected that those forming the Community would be men of inferior capacity or working powers, or who had no sufficient ambition or interest in their work to make them wish to attain to a less dependent life. Upon such a Communal farm disputes are likely to occur, owing to the attempted employment upon equal terms of those possessing varying powers ; frequent changes by those leaving, who think they can do better for themselves independently ; and difficulties in the management. Lastly, for such a work it would be difficult to raise or borrow the necessary capital, because there would be no individual responsibility for the same. When these reasons are remembered, it is not a matter of surprise that though sixty years have passed since the successful Ralahine experiment, no attempt of a similar nature has been made in this country. The same reasons fully account for the failure of several efforts which have been made in America to carry on Communal farming, none of which have lasted more than twelve years.

Co-operative tenancy.—About the same date as the Ralahine experiment a company was formed, which had for its object the co-operation of its members in becoming tenants of a farm, and dividing the tenant's profits. This company originally consisted of fifteen members, who were assisted by a loan of almost all the capital from the landowner, who took a farm at Assington, in Suffolk. As it proved successful, a second company was formed in 1853, taking a

second farm in the same parish. Both farms did well until the recent depressed times of agriculture. The first farm continues work on the old basis, while number two has been worked by a new co-operative company since 1884. The profit on the latter for the year ending October 1892 was £35.

Companies have been formed elsewhere to carry on farming, and have met with varying success. A company carrying on a farm on the principles of co-operative tenancy should not employ any more labour than if the farm were worked by an ordinary tenant, nor need the labourers be rewarded in a different manner. Co-operative tenancy would have the advantage of making a larger number of people interested in farming, and thus in the general prosperity of the country; it would secure amongst those interested profitable markets; and it is possible that consultation as to the management of the farm might lead to ideas which could be profitably followed. The system, however, has many disadvantages. There would be difficulties in securing a competent and reliable manager; his remuneration would be nearly as much as the ordinary profits of a tenant; the expenses of finding the capital, and costs of company management would be extra charges beyond what a farm would ordinarily have to pay; and lastly, there would be a great disadvantage in not having the absolute control which a sole tenant would possess, bearing in mind that quick decision and a continuing fixed policy are necessary for successful farming.

The failure or success of a tenant is dependent upon his skill, management, character of farm, and the seasons. The same causes will render uncertain the results of a co-operative association taking his position. The results of most of the experiments which have been tried appear to

show that the disadvantages of the system have had a greater financial influence than the advantages.

Profit-sharing.—The third-named class of co-operation, viz. Profit-sharing, must be noticed at somewhat greater length. By some it is considered the most practical of all reforms which could be introduced in order to benefit those making a living from their labour upon the land. For the labourer to receive part of the profits of his work, if it is specially successful, must certainly be of benefit to him. That the admission of this principle is also beneficial to the employer is not so apparent.

The average profits of large farms would be considerably raised if the same care was shown in the details as is given by a labourer working in his own garden. So high a standard it would be unreasonable for a large farmer to expect. Some increased efficiency in the labour might however be obtainable if the labourer were made interested in the success of the farm. To make him dependent upon the profits without wages would lead to some of the difficulties previously noticed when referring to Communal farming. To give a share of the profits in addition to wages is free from those disadvantages. If a labourer be offered a share in the profits, and is brought to see that he is pecuniarily interested in the farm, it will cause many a man to give additional thought, energy, and care to his work. It may give in some cases that incentive to the younger and more competent men to remain at farming work. It will at least secure for the owner or tenant who adopts this plan the best workers and the best conducted men. It is impossible to estimate the amount which this system would save. If no profits are made from a farm employing labour remunerated in this manner, it is evident

that the results would have been still more unfavourable had the men been engaged at the same wages, but not giving that extra care and work which the offered share in the profits might produce. If the profits are satisfactory, then it is reasonable to suppose that a part of the same is due to the extra care taken by the men. It is for these reasons that profit-sharing has lately become frequent, and in the opinion of many has proved to be beneficial to both employer and labourer.

Many different ways have been devised for carrying out the principle of the division of part of the farming profits among the labourers. These ways may be divided into two classes; the first including those cases in which the labourers were admitted to have some share in the management of the property; and the second, those cases in which the division of the profits has been a voluntary act on the part of the owner. The first-named system has been carried out in two notable instances, viz. at Harleston in Northamptonshire by Lord Spencer, and at Radbourne in Warwickshire by Mr. Bolton King.

In the case of the former, the farm comprised 296 acres, of which about 140 were grass land. It had been worked for some years by Lord Spencer upon the ordinary system, but the experiment of making the labourers interested in its success was not commenced until the year 1886. A company was then nominally constituted, the whole of the capital however being found by Lord Spencer. Eight of the best labourers in the neighbourhood were chosen, and made participators in the movement, receiving ordinary wages, but in addition being entitled to the profits. Not having found any part of the capital, they could not be considered co-operative tenants, but were allowed to have

some share in the management, two of them being selected to consult with the manager, who was appointed by Lord Spencer. The results of this farm have been distinctly unfavourable. In the first year a loss was made of £200, and in the second year a loss of nearly £600. In the third and fourth year the expenses were met. The balance sheet for the fifth year ending on March 25, 1893, had not been received by the writer up to the time of this publication, but is expected to show a loss. It is impossible to say whether a tenant-farmer at the same rent, and paying the same wages to the labourers, would have produced better results.

In the case of the farm at Radbourne the disadvantages named when mentioning co-operative tenancy have been fully experienced. It was organized by Mr. Bolton King, the owner of the estate, who in 1883 gave up the Radbourne farm of 350 acres for the purposes of the experiment. Subsequently a second farm was rented by Mr. King, making a total area of over 730 acres. About 20 labourers were employed and paid full wages, the profits to be ascertained at the end of each year, and then divided. The system of management was the same as that adopted in the case of the farm at Harleston, viz. by a manager appointed by the landowner, who provided all the capital, and two of the labourers were appointed to act with the manager. Since the organization started there has been continual loss, the worst being 1885, when there was a deficiency on the working of the original farm alone of over £600. In the year 1890, after seven years' trial, Mr. Bolton King discontinued the work, which had been a heavy financial loss to him. There can be little doubt, after consideration of the detailed results of the working of these

properties, that if worked by a competent tenant, the results would have been better, and at least in certain years some profits would have been made. Mr. King does not consider that the labourers showed such additional energy and care as might have been expected.

The results of profit-sharing carried out by employers in those cases in which the labourers have not been allowed to co-operate in the management have proved more satisfactory. Every effort in this direction with which the writer is acquainted has apparently been successful. A gift of from 20 to 33 per cent. of the profits of a farm to the labourers has in every case secured some of the advantages previously mentioned as likely to follow if the labourer were made interested in the products of the land. In no case where this system has been adopted has the writer heard of any desire to discontinue the practice.

Probably the largest profit paid under these conditions was that of £11, paid in 1870 by Mr. William Lawson to every man, woman, and child employed upon his farm in Cumberland. Mr. Lawson commenced working his farm in 1861. He made various proposals for co-operation and profit-sharing with the labourers with varying success until he sold the farm in 1871.

In the Journal of the Royal Agricultural Society for December 1891, Mr. Albert Grey gives full details of the system under which he has introduced such profit-sharing upon a large scale. He was then farming on this principle nearly 3800 acres of land, over 2400 of which are arable. He commenced working one of these farms, viz. East Larmouth, in 1886, and the accounts of this farm have been published. The results may be summed up by stating that the full rent of £1431, with 4 per cent. interest on the work-

ing capital, has been paid for the last six years ; that the farms are in far better condition than when possession was taken of them ; that the cash bonus to the labourers paid at the end of each year has sometimes been as much as 1s. 3d. in the £1 on the total amount of wages paid during that year ; and that a total of nearly £500 has been paid either as cash bonus to the labourers, carried to a reserve fund, or allowed as additional interest on capital. The writer cannot do better than to quote from Mr. Grey's article already referred to. He sums up his views in the following words :—

“The advantages to the labourer are evident. The fact that the labourer is trusted, and welcomed as a partner in the profits of the farm, in itself lends a new complexion to all the various duties which go to make up his working-day. He is conscious that a great dignity attaches to his position, that his status is improved, and as a natural consequence his labour is invested with an attraction it did not formerly possess.

“Neither can it be doubted that the knowledge that he and his fellow-workers will share the benefit which the farm may derive from his forethought, his energy, and his skill, helps to lift from off his work some of the burden which weighed it down, when he reflected that however well and efficiently he might serve his employer, no benefit would accrue to his fellow-workers or himself.

“In short, where the profit-sharing principle is successfully applied, it lightens the task, it increases the wage, it gives hope, it stimulates the faculties, and it frees the worker from that paralyzing atrophy which sooner or later asserts its sway over men who have no interest in the produce of their industry, and to escape from the fatal influence of

which so many of the best of the young hinds are leaving for the towns.

“And if the profit-sharing system helps, by increasing the efficiency of agricultural labour, to increase the gross produce and the nett profits of the farm; if, further, it tends to impress the agricultural labourer with a greater sense of the duties and responsibilities of citizenship by making him realize more vividly his position as a ratepayer; if, too, it helps to reconcile the agricultural labourer to his life, and thus do something, however little, to check the growing desire for employment in the towns, who can measure the extent and volume of the benefit which the State will derive from an enlarged application of the profit-sharing principle to this country?”

On first consideration there is one practical disadvantage which profit-sharing appears to possess in relation to the subject treated of in this publication. It is desired to find practical means by which more men can be employed upon the land. From one aspect profit-sharing is detrimental to this object, for any step taken to increase the economy of labour will diminish at first the number employed. This view must however be considered in a wider sense. If the labourer gives more thorough and skilful work, takes more care in details, uses wise judgment in the execution of his work, and makes full use of his time; then the result would be so important that farming might again become profitable, though fortunes cannot be expected to be made as has been done in the past. From the records of Mr. Grey, it appears that in every year some profit has been made from his land, in addition to paying a full rent. The result is very different from the returns for the same period from those co-operative farms previously referred to in this chapter. It is also a

more favourable record than can be given within the experience of the writer, by other farms in various districts.

Under the existing conditions of farming there is so small a margin of profit that this one point of giving to the labourer an interest in the success of the farm may render a profit certain instead of being a matter of speculation. There are many large tracts of land perhaps inconveniently situated for rail access, or which for other reasons are not sought after by tenants. In a few cases this land is absolutely uncultivated, but generally speaking it is partly worked by the landowner with a minimum expenditure and very uncertain results. If once the owners of such properties appreciate that this profit-sharing with intelligent labourers is the one thing which will render a return certain, and that if they adopt such a principle, with good management they can scarcely fail to make some profit, and in good seasons possibly a large one, they will then take more active steps to cultivate fully these large areas.

It must be remembered that profit-sharing is difficult to apply to farms cultivated, as they usually are, by tenants. It is seldom that the latter would keep sufficiently accurate accounts, and tenants for many reasons may not wish their profit to be known, which is a necessity if the labourers are to have some portion of it. It would be possible to adopt the system of some commercial firms sharing their profits with workmen, and who fix a certain profit, known only to themselves, before any division is made. With the uncertainties of farming profits, this, however, would be difficult to do. The system cannot therefore be expected to be largely applied to ordinary agricultural tenancies.

The best method in which a landowner can introduce the principle of profit-sharing must entirely depend upon local

conditions and circumstances. A desirable method will be found to consist in charging the farm in the first place with interest at the rate of $3\frac{3}{4}$ per cent. upon the value of the land, and 5 per cent. upon the value of the implements and working capital necessary, as well as paying all ordinary outgoings. After the amount so arrived at has been charged in the nature of rental, and the annual valuation made, the profits could be ascertained. From these profits might first be deducted a sufficient sum to pay to each labourer a bonus of one shilling upon each £1 of wages paid to him during the year. This would be equal to an increase of wages of about ninepence per week each. After this had been charged, it would be equitable to divide the remainder of the profits into four equal parts, as other interests in the farm should derive some benefit from what all had helped to produce. One of these parts could be for additional division among the labourers, the second entirely for the management, the third to be carried to a reserve fund, and the fourth credited to the owner for additional interest upon the capital invested. To see the manner in which this system would work practically, it is possible to give as an example its application to a farm of 610 acres now being worked by the writer. The profits from this farm having been made up for the year ending Michaelmas 1892, amounted to about £380, before charging the salary of manager. This amount and a bonus of 1s. in the £1 upon the wages paid to labourers of nearly £600, leaves a margin of profit of £240. The principle just named applied to this last-mentioned sum would give £60 extra profit to the manager for his special skill; £60, or an average of 1s. 6d. per week for the entire year, for each of the labourers in addition to their wages and the bonus previously named; £60 to

the owner in addition to the full interest on £15,000, his capital invested in the land and farming; and £60 to be carried to a reserve fund to equalize the amount divided in unsuccessful years. The profit from this farm may be larger in the future, as much of the labour was expended upon hop-growing, which, owing to the season, was unsuccessful, and did not pay the cost of cultivation.

Every social reformer, all who wish to improve the condition of agriculture, and any who wish to see our land yield the maximum amount of produce, can therefore safely advocate the adoption and extension of some such principle of profit-sharing as that which has been lastly discussed.

Co-operative ownership.—The principle of co-operative ownership by those working a landed estate, can be carried out if one or more capitalists are prepared to find the money for the purchase and stocking of a certain property, the ownership nominally to remain with those who are actually working the estate, and who will be entitled to the increased value, by reason of their work or residence on the property. If capital were so provided, the best method by which the colony would be founded would be by obtaining a property of not less than 1000 or 1500 acres; about one half being in possession, the remainder being tenanted. Having laid out about 100 acres for the future village, the area of land in possession would be worked by the co-operators, employed under the directions of the committee elected by them. Each would be paid wages for his labour on the land, his time not used for that class of labour being at first available for general work in the formation and laying out of the village. Various rural industries, as named in Chapter V., could then be introduced, more especially for the employment of the families of the co-operators; and

manufacturers might be induced to bring their capital and their works to the settlement in consequence of the cheapness of land and amount of labour obtainable. The area not worked under directions of the committee could be gradually subdivided, the small holdings thus created being let to those co-operators who had been working as labourers, as soon as their share of profits was sufficient to provide them with the necessary capital.

If this system were adopted, an area of 1500 acres, now maintaining perhaps not more than 50 persons, at the end of a few years might be finding a living for 300 men with the families dependent upon them. Three conditions would appear to be absolutely necessary to ensure success, viz.—(1) The property must be suitable in character, surroundings, and situation. (2) The work must be of a co-operative character, and those taking part in the Settlement must be those who would remain faithful to co-operative principles. And, (3) sufficient capital must be provided. We will briefly consider the possibility of complying with these conditions.

As to the property itself, it is necessary that it should consist of good-class arable land, capable under hand cultivation of bearing heavy crops; some part must be high, with healthy subsoil, for residence; a railway should cross some portion, from which in the future siding accommodation could be obtained; the property would have to be purchaseable at a low price; and though some distance from a railway-station, that station must be readily accessible to London. To find all these conditions would only be possible either in Essex or Hertfordshire; but with the present difficulties of letting large arable farms, they could probably be secured in one of those two counties; the site

suitable for the village being the most difficult requisite to fulfil.

As to the co-operative principle being necessary, the first settlers would have much hard work and many difficulties to contend with in the initiation of the movement, and the only compensation they would get for this would be their share of the increased value of the property. They would have to feel that all the work they did beyond the amount sufficient to supply them with a maintenance, was adding to the value of their own freehold, which they would be able to realize for their own benefit. The increase in value of such a co-operative estate under capable direction would be substantial and to some extent rapid. A suitable property could be purchased for £10 to £12 per acre, which, cultivated by hand or in small holdings, would soon reach an agricultural value of £30 to £40 per acre. That part which was laid off for the formation of the village would be held for leasing at a ground-rent which, though not approaching the value obtainable for land in any established town, would certainly capitalize at £200 to £300 per acre. Every man, whether solely working as a labourer on the land, or at industries, and in either case giving his time on a recognized minimum scale of payment, would have an equal share in the ownership, and thus in the profits made, whether those profits were from rentals, returns from his own labour, or increased value by reason of population being attracted to the Settlement. The number of shares in the undertaking would be determined by the size of the property, and to get successful workers these shares should be of a small nominal value, say £1. Any man having no capital beyond that sum, but being willing to work, could then come to the Colony, and would be employed under a

foreman in that class of work considered most desirable by the committee. If his work proved unremunerative he would have to leave, and the amount paid for his share would be returned to him. If his work was satisfactory he would remain, drawing his wages as agreed, being entitled to the extra profit as will be hereafter named. Any of those possessing capital, technical experience, and skill, and coming to the Colony as employers of labour, farming tenants, or expert workmen, might take a share if they wished to do so. They would then obtain a share in the general increased value of the Colony, in addition to such profit as their skill or capital returned to them.

The greatest difficulty in the formation of such a colony would be the finding of the necessary working capital. The Communal system has been shown to be unworkable as applied to agriculture; while co-operative tenancy has not given satisfactory results. To give the co-operators, however, the additional inducement of a share in the actual freehold, and to work the property under an intensive system of cultivation, mainly by hand husbandry, as well as having the assistance of industries, might make an important difference to the result. In order, however, to ensure success, there must be capital obtainable of from £15 to £20 per acre, in addition to the purchase price of the land. Can this in any way be raised? To attempt to obtain any part of the sum by appealing for subscriptions to the charitable, would be ineffective; and to the extent to which it was successful, would probably be diverting the amount so obtained from sources where it would produce more good. To raise money by debentures or shares is possible for such work as is named in the two previous chapters; but this is not so in the case of a co-operative estate, where the in-

creased value of the property will remain with the co-operators. The only way therefore in which such a scheme can be put in operation, is by the assistance of wealthy friends of co-operative work ; possibly assisted by the funds of co-operative associations already in operation. It is not impossible that a sufficient amount could be raised in this manner. Supporters of the principle of co-operation have found the capital necessary for the various efforts mentioned in the earlier parts of this chapter. For instance, the capital and purchase-money of the estate in Cumberland which Mr. W. Lawson devoted to the intermittent experiments in co-operation referred to herein amounted to over £50,000. It must not, therefore, be assumed that the capital would not be obtained, as there would be no doubt as to the property being able to pay interest for the use of the same.

Assuming that 1500 acres of land were obtained, with a sufficient number of co-operators to commence effective work, but limited to 300 in number, and that sufficient capital was available, we will briefly notice the system which might be pursued. The increase in value of each share at first would be speedy. The actual value would be known each year after the annual value of the saleable value of the property. From the total value then ascertained, would be deducted all liabilities to capital and otherwise, and the balance being divided by the number of shares would give the value of each. On the share of any worker becoming of a value which would enable him to borrow £50 upon it, he would be in a position to take one of the small farms on the estate. This could be granted to him on a perpetual lease subject to a future re-assessment of the land value should a new railway, development of natural resources, growth as a manufacturing centre, increase of

population, or any other causes except his own labour create additional value which should be for the general benefit of the co-operators. The tenant thus established would be in as good a position as a freeholder, subject only to payment of the rent, and would have his share in the united property increasing year by year, which he should be able to realize at any time, if he wished to leave the Colony. The whole of the shares would not be taken up at the commencement, and those not then acquired would only be issued at their value, as shown by the annual balance sheet. Within a comparatively few years of the initiation of the movement, perhaps 50 acres of the area upon which the residential settlement was made, would be worth £200 per acre, 150 acres of allotment land adjoining £60 per acre, 750 acres under hand cultivation by labourers about £40 per acre, and the remainder in small holdings would not have a lower value than £30 per acre. Deducting from this total the original cost of the land, any expenditure upon public works, and depreciation on those buildings not worth the amount of their cost, the Colony might show a surplus of £40,000 on the capital invested. This would be £130 for each share.

If the co-operator had been able to find the money to acquire the five acres represented by his share independently, his increased value would have been nearly as much; but the advantages he would have gained as a co-operative owner would have been wages, while his land may have been unproductive at first; the use of capital which he could not have obtained independently; the benefit of any increase of value by reason of causes named in the previous paragraph, which would only arise from co-operative work; and lastly, the advantages of the public works which

the committee of the Colony would provide. To use the surplus income as it increased, in adding to the public conveniences and advantages of the Settlement, would be a better plan for the Ruling Authority to adopt than to pay interest to the co-operators upon the value of their shares.

If, therefore, capital can be found, there are undoubted advantages attaching to co-operative ownership on the basis named; and proposals brought forward with this object should not be deemed unworthy of consideration.

The only work in which a settlement of small owners has been tried in England is in the case of the farms forming the Fruit Farm Colony at Methwold in Norfolk. This is an estate of 100 acres laid out in lots of about two acres each, these lots being sold for £70 to purchasers, who plant them as fruit orchards. The actual outlay for each purchaser, including house, land, and planting, is over £400, while the returns for the first few years are inadequate for the maintenance of the purchasers. The estate was only acquired in 1889, and whether it will ultimately secure a satisfactory living for the small owners has still to be shown. It is a colony formed mainly for vegetarians only, on the basis that all the necessary food can be raised upon the colony. Even if the necessary food be there grown, a large quantity of the produce will have to be realized to pay the other expenses of maintenance of a family. This cannot be done without difficulty, unless further arrangements are provided for dealing with the produce by co-operative factories. In any case, extension of such colonies in other parts would be practically difficult, in consequence of the large amount of capital required, which must be at least £500 for each fruit farm.

CHAPTER VIII.

SETTLEMENT ON LAND ABROAD.

WE will now consider under what circumstances colonization, or settlement of small holders abroad, will be preferable to their establishment upon land in this country.

Reasons in favour of settlement abroad.—The most important reason in favour of colonization is that in our colonies there are many millions of acres of first-class quality land only requiring skill and capital to render them productive. Labour expended on such land will not only give a remunerative return to the settler, but will also add to the natural resources and productive character of the country in which the land is situated. Colonial governments, therefore, generally give special advantages to persons desirous of becoming settlers, and land can frequently be obtained free of cost or at a nominal price. Not only is land obtainable on easy terms, but the buildings would be less costly. In place of the expenditure of £150 to £200 for such buildings as are considered necessary for small holders in this country, for settlers who start roughly in the colonies, destitute of the comforts which even English cottagers have, and which Local Boards at home require, a sum of £30 to £40 is sufficient, in addition to

their own labour. In fact, in the estimates issued for the guidance of crofters who are being established in Canada, only £15 to £20 each is allowed for this expenditure. Abroad a settler is satisfied with a hut of rough logs filled in with sods to form a wind-, weather-, and water-proof dwelling. The expenditure upon such erection and out-buildings in connection with same is very different from that necessary for the erection of such brick or concrete house which alone would be held in England to afford sufficient and adequate shelter and accommodation. The same area of equal quality land will maintain a man abroad as here, if he grow the produce needed for his own consumption; but to acquire the land and buildings necessary for twenty families in this country will cost £5000, while the same amount used in a new country would be sufficient for land and buildings for five times that number. With the exception of these two items, the capital necessary for establishment abroad would be equal to or more than what would be required here.

Another important reason in favour of colonization rather than assisting people back to the land in this country, is the limited quantity of uncultivated or waste land here which will pay for the training and employment of unskilled labour. In our colonies it is a different matter, for if the district be well selected, in almost every direction are areas of uncleared or prairie land well situated, and of good soil, upon which unskilled labour will yield good returns in the increased value of the land.

Then our colonies offer more scope for general employment. Some years ago this might be more generally true than at the present time, for now in the majority of the colonies in the neighbourhood of all large towns, the labour

market is fully stocked with artisans and skilled labourers. There is thus difficulty in finding employment for any except those who are prepared to go upon the land and work thereon, either for themselves or as labourers. But to the intended settler, who goes to a country district, opportunities frequently do offer of remunerative work in that new locality in road-making, building, lumber work, clearing, and other operations of a like nature. For unskilled labourers satisfied with such rough work as a means of income, there is no doubt more opening in the colonies than there is for their employment in this country.

Then again, many persons who would be capable of succeeding upon the land are those who, either through misfortune or their own fault, have lost their position and livelihood in this country. In making a fresh start, these persons would frequently prefer to do so in a new land, free from old associations and friends.

But the greatest advantage which a colonial life will give, is the probability of settlers in the colonies securing a much larger income in the future than they could have done by farming in this country. To live on a small holding has been shown to be possible, but to save any large sum from the same is impossible. Although at first the life of a colonial settler will be more uncomfortable than on a small farm in the home country, he will have a chance of becoming owner of his own property at a comparatively early date. The amount necessary to purchase the holding would not much exceed the yearly rent of a similar area in this country. Then, in addition to becoming the owner of the area which he has to cultivate in order to obtain maintenance, he may have a grant of fifty, eighty, or more acres of rough land, which at the time of grant is worth

little. Not only can this land be made of agricultural value of possibly £2 to £5 per acre, when cleared and cultivated by his own labour, but there is always the possibility of a further large increase as the neighbourhood develops, and as the township formed by the first settlers increases and becomes an important centre.

If this occurs within a few years from the time when the land was granted by the colonial government, either free or at a nominal cost, it is possible that the owner might be able to sell his property at even £10 or £15 per acre. It is this advantage which the settler abroad will possess over any small holder established here ; that is considered the compensation for the difficulties, troubles, and discomforts which a colonial settler will at first experience. It is, therefore, certainly desirable to consider in some detail what are the necessary qualifications for a settler on colonial land, and how men without capital can be established in such a manner that they may not only make their maintenance at once for themselves and families, but also have a reasonable probability of becoming landed freeholders in the immediate future.

Previous attempts at colonization.—The qualifications of a good settler differ from those of a small holder, and if capital is to be lent in order to enable an intending settler to acquire a property abroad, great care must be taken in his selection and training, or a great risk will be incurred as to loss of capital. Before determining what the qualifications for a settler should be, it will be useful to notice the results of some of those efforts at colonization which have already been made, for these efforts, whether successful or otherwise, have given experience which is of a useful character. Many societies and individuals have assisted in

the work of emigration. Attempts at assisting colonization have not been so frequent.

That colonization has been successful when colonists have possessed capital is undoubted ; and every colony can show successful settlements which have been made by those who have possessed substantial funds. Moreover, in several different colonies settlements have been satisfactory when made by communities of persons possessing even so small a sum as an average of £100 to £150 each. In New Zealand, Queensland, and Victoria such settlements have proved satisfactory, both financially and otherwise, especially in the first-named country. In Natal one settlement was formed in 1880, and a second in that country was effected by a party of Norwegians in 1882. This latter has been particularly successful, due mainly to the personal character and frugality of those forming it. The Natal Government have more recently established, and are assisting, a third settlement, upon which only those who have a minimum capital of £200 are received. In many parts of Canada such settlements have been promoted or assisted by commercial companies. The experience, however, gained from settlements in cases where substantial capital was found by the settlers is not specially material when a method of colonization with those practically destitute is to be determined.

The test of success in any such scheme as last mentioned should be that the settlers remain upon their holdings and gradually reduce, year by year, the debt upon the same, until at length they possess their property unencumbered. Applying this test, it must be admitted that up to the present time, colonization schemes with the class of people named from either England or Ireland have not proved generally successful.

The earliest attempt of any with which the writer is acquainted was that made in the year 1880, when some thirty Irish families were established in Minnesota, the whole of the necessary capital being lent to them. Apparently this attempt was made under the most favourable conditions, every settler being of the same religion, which is a great aid to successful organization. At the end of two years five only of those established remained upon the land. A somewhat similar attempt was made two years afterwards, and met with equal failure.

In 1883 a more successful attempt was made, mainly at the cost of Lady Gordon Cathcart. In that year, in 1885, and in 1886, altogether 76 families were emigrated and settled upon land in the North-West territory of Canada. To each of these a loan of £100 was made upon security of the homestead, granted to them in accordance with the regulations of the Canadian Government. This settlement has been under very skilful direction, and has been partially a success. In 1891 one of the tenants had repaid the amount of capital loaned to him; though, even as late as this year (1893), certain of the settlers had not commenced to repay the loans made to them. Some of the settlers possessed capital, and not one has been successful who did not risk some of his own money, though in some cases the amount was small.

In 1884 about 120 persons were emigrated from East London to a settlement in the North-West territory. Out of these in 1891 only 20 remained, and little had been done even by these in repaying the loans which they had received when they had arrived upon the settlement.

In the year 1886 a colony was formed in South Africa, at the expense of Lady Ossington, under the direction of Mr.

Arnold White, and 24 families were settled upon it. In under three years not a single settler was left upon the colony. So complete and unexpected a failure is stated to be owing to the fact that the land was not well selected, but there were also numerous other reasons. In the year 1888 a second colony was formed in the same district under the same direction, when 25 families went there. This colony has not been so complete a failure. About one-half the number of original settlers had left in 1891, but their places have been filled up by others. The cost was extremely heavy, being nearly £300 for each family, and until very recently the progress of this colony does not appear to have been altogether favourable.

But it is necessary to notice at greater length a more recent settlement under the official sanction and assistance of the English Government, viz., the settlement of Scotch Crofters in Canada. In 1887 the scheme was sanctioned for carrying out this experiment. The sum of £120 was to be loaned mainly from Imperial sources to every family, the repayment of which was to be in eight annual instalments of £20 16s. 8d. each, commencing in the fifth year after establishment. Under these terms 30 families were selected and arrived at Killarney in Manitoba before the end of June 1888. In May 1889, a further 49 families arrived, and were located at Saltcoats, in the North-West territory, about 200 miles from the other settlement. Each of these settlers were allowed 160 acres. At first there was great dissatisfaction on the part of many, but apparently it was not more than might be expected from those who could not readily settle into their new conditions of life, and who were entirely inexperienced and untrained for the work which they had to undertake. Not only was no special training given, but the

settlers were not well selected, while the amount loaned to them was manifestly insufficient to enable them to start in a satisfactory manner. In 1891, 62 families remained upon the locations selected for them, two had returned to Scotland, and the others had either removed to other land or had taken employment as labourers. The third report upon these settlements, issued in April 1892, was very satisfactory in respect of the Killarney settlement. All here express themselves as better off than when in Scotland. Many have erected comfortable houses and some have much farm stock. The total value of land, buildings, and farm stock is estimated at £16,000, with a total indebtedness of £5000. This shows the average value of the property of each tenant to be £520, with a debt of about £170, giving a nett gain of over £300 for each settler in the three years, as well as providing his maintenance. The report issued in May 1893 shows a further average gain of over £100 for each settler.

In the case of Saltcoats settlement, the result is not so satisfactory. One result of so small a sum being granted from the Government was that these settlers had to contract heavy debts with local merchants and traders. With the experience gained from these settlements, colonization can certainly be held to be practically possible under proper conditions as to capital, land, and training of settlers.

But probably the most hopeful experiment of any is that devised and being carried out in connection with the Emigration Scheme originated by Dr. Barnardo, as a branch of his Stepney Boys' Home. Originally a farm was secured mainly for an Industrial Home, where the new emigrants could be maintained pending the selection of suitable situations for them. In extension, however, of this system in 1887, a larger farm of 9000 acres was secured, situate near

Russell, in Manitoba. Here the older and bigger boys, who are specially trained, are sent, and a scheme of colonization has been introduced. A competent lad, who has passed through the preliminary training in England, and who has afterwards shown upon the Manitoba farm special experience and capacity, and is over eighteen years of age, is accepted by the Canadian Government as a settler, and receives a grant of 160 acres of land under the usual conditions. This young settler is supplied with tools and implements from the Home Farm, and is loaned sufficient to enable him to establish himself in an independent position. Up to May 1893 several had been in this way established on the land, all of whom were doing well.

But the two most notable instances of successful colonization in Canada with those possessing only small capital have been cases where the settlers were not from our country. One of these is the settlement of the Mennonites, consisting of about 1100 families, numbering over 5000 persons, who mainly through religious persecution were driven from Southern Russia, and formed a new home in Canada with the assistance of the Government there. They arrived at their settlements on the Red River in the years 1884 and 1885, the wealth of the entire community at that time being an average amount of less than £20 for each family. On their first arrival they lived in village centres, great care being taken in the allotment of land, and in the provision of a sufficient cultivated area for the use of each of the settlers before they were left to earn therefrom an independent maintenance. Within five years of their arrival upon the settlement it is stated that they had comfortable buildings, a large amount of farm stock, few outside debts, and land in a capital condition of cultivation. Some of the

details of the system of colonization to be suggested in this chapter are based upon this successful effort.

The other instance is a settlement of Icelanders in Southern Manitoba, which is specially useful in consequence of the careful records that have been kept of the work done, and the indebtedness and value of the settlement each year. In 1882 twenty-four families arrived from Iceland, possessing an average of not more than £30 each, and since that time further families have come out, till, in 1891, the settlement consisted of 113 families and a total of about 600 persons. In that year the indebtedness of each family averaged about £140 each, while the value of land, buildings, and stock was about £600 each. The increase of value of the property of each settler differed considerably, but the total wealth of the 24 families who first settled upon the property was over £19,000, after having discharged all their debts and having maintained themselves since their arrival upon the settlement. The results during the first years show an increase in value averaging about £100 for each family every year, which is about the same return as obtained from the Killarney settlement of the Scotch crofters.

Test farm in England.—Having noticed the results and efforts at colonization abroad, mention should be made of the experience gained by any work in operation in England to test the competency of intending settlers. The only attempt made in this direction is at Audley End, Essex, in connection with the Self-Help Emigration Society. This deserves a longer notice than can here be given, and a report to April 1893 will be found in Appendix on p. 215.

Qualifications necessary for an intending settler.—If the mistakes which have been made in these various attempts are to be avoided, much more care must be taken

as to the qualifications of settlers. Experience clearly shows certain definite points which should be insisted upon, the most important of which can now be stated concisely as follows—

(1) Every settler must possess some capital of his own, even if only a trivial amount in proportion to the total sum required. Unless he is risking something himself he will not be likely to put his whole interest into the work. If, however, he has put all his money into the preliminary expenses of founding a home, he is not likely to give it up in consequence of light difficulties, or without a determined struggle.

(2) He should have a capable wife accustomed to outdoor work, and who will be satisfied with something less than the ordinary comforts of an English cottager, at least at the commencement of her colonial life. An unmarried man at the first difficulties he encounters will be rather inclined to throw up his hard work forgetting his possible future prospects, and go into the nearest town if he hears rumours of high wages there, regardless of the fact that such employment may be uncertain and only casual. Colonial governments, moreover, do not so freely welcome and assist single men, for it is the various members of a family growing up that will not only be of great practical use in aiding the progress of the parent settler, but who will also assist most in adding to the stability and developing the resources of the country. When a man is not married, three or four companions may be started upon one settlement. Unless, however, they are mutually approved and selected, this has not been shown to be desirable, and under no circumstances should only two strangers be placed to work together.

(3) He must have some knowledge of various trades or

general labour. A man, however good a farmer, is unsuitable unless he can do something else with his hands which will be useful. Thus he should know something of building work, carpentering, or be able to use tools for joinery work, making furniture, or some article of domestic utility. Then to make a successful worker on the land he should have had actual experience of digging or hard labour of that kind, and have proved physically capable of doing it. In addition to his general experience, in which he should be tested before leaving for a colonial settlement, a knowledge of many indoor trades would be useful, or if he had been an engineer, a miner, or an artisan of any kind, it would render him all the more competent. Such special training or experience would be of use either to himself or to his neighbours in exchange for payment to him.

(4) He should be a man who is accustomed to living on independent earnings obtained by the exercise of thought on his part. A man who has had to use his own brain and independent judgment will not only be quicker in taking advantage of opportunities which may offer of improving his position than a man whose work has always been dependent upon the will or direction of another, but will be better satisfied with the variety of work and hard life of a settler, and also more contented with his position. He will probably know of the difficulty of getting work in towns, and have had practical acquaintance with the life and difficulties of a casual wage-earner, and will therefore more readily accept the hard work of a pioneer settler, seeing that as long as he does that work faithfully it will give him certain maintenance free from anxiety, with possibly in the future such a position as he had never before been able to attain. An agricultural labourer who has been living for years on

regular earnings for doing work involving no forethought or ideas beyond what he has been told to do, will frequently be the most unsatisfactory settler. Especially has this proved to be the case when he has spent the whole of his savings in emigration, expecting to make his fortune, or at least to "better himself," abroad.

(5) He must have proved himself to be a good worker. There are some who, possessing the foregoing qualifications, may volunteer for colonization because they have a false idea of what things are abroad, and think they can there find an easy place. Many men of this character are among the best talkers, and by the use of that gift would possibly be able to borrow a sufficient amount of capital from some source to make a trial on a colonial settlement. As soon as they arrive they will be among the first to become discontented with the difficulties which all pioneers must experience, and thus their powers and talents may be used to promote discontent and dissension among the early settlers.

(6) He must have agricultural knowledge adaptable to the circumstances under which the settlers will be placed. The neglect of this has been one of the greatest causes of failure in the past. A tenant cultivating a few acres by spade husbandry has, by reason of his agricultural knowledge thus acquired, been considered experienced for a colonial farm of perhaps ten times the area he had previously managed. It is obvious that this latter farm must be worked under different conditions, and in a totally different manner from any to which he has been accustomed. Some means must be found for giving and testing knowledge on this point before placing such a man in control of an independent holding. Not only must the settler know something

of the farm crops to be grown abroad, but also have some knowledge of gardening and of growing the most useful vegetables for human consumption.

Such are the main qualifications necessary for a settler. Any man possessing these qualifications, and who is further made acquainted with the climate, circumstances, and character of work in the colony to which he is to go, and who expresses a wish to become a settler, and to work at first as a labourer, can be safely assisted abroad. He will certainly have a good chance of future success for himself, with benefit to the country chosen, and under proper conditions without financial risk to those helping him.

Examination as to qualifications.—It is next desirable to consider the best means which can be devised for testing men as to their possession of these qualifications. Evidently such test or examination cannot be only theoretical, nor can it be completed in a few hours. It will therefore be necessary to obtain some property in this country where any candidates for becoming settlers can remain for not less than one week, to be tested as far as possible as to their abilities in the various directions in which knowledge is required. During this period each one could be tried on digging work, for perhaps two days, to judge of his willingness and speed of work as well as his competence. In other matters, testing his knowledge would not take so long. A day in the workshops would show what use he could make of tools ; another day would be wanted for oral examination and practical testing in garden work ; another day might be given among the farm stock, and obtaining the ideas of the intending settlers as to general farming operations ; and lastly, a day would be usefully spent in general oral examination as to his ideas concerning finance, methods of farming, knowledge

of the country, and general work of a settler's life. At the end of a week occupied in this manner, the superintendent could well certify as to the particular qualifications of each man so examined under these respective heads. He could further give some information as to their general character. When the party of settlers was made up, prior to departure they could have a few days more at the Trial Farm. They could then receive special information relating to the neighbourhood to which they were going, the natural products of the country could be shown, a building such as they would be expected to live in erected as a specimen, and various colonial implements which they would in the future have to use explained.

To purchase a sufficient area of land for the Trial Farm, to build and furnish the necessary buildings, and to equip same in proper manner with museum and specimens, would involve a capital expenditure probably of as much as £3000 to £4000, provided there were no farm in existence, as suggested in Chapter IV. Even, however, if this were not organized, there may be some who would be prepared to assist in founding a Trial Farm, more especially because such a system of practical tests, as already pointed out in more detail on page 90, would be useful to colonial governments, organizations for assisting emigration, and, with certain alterations in the course of examination of the men, to those desirous of assisting competent men to take up land in this country.

It has already been pointed out how those upon the training farm would be able to earn some surplus beyond their maintenance. As those who wished to go abroad would in most cases be the most enterprising, energetic, and generally skilful, they might be expected to earn a larger

sum than any others upon the farm. Any steady man who had the capability and working powers which he must possess to comply with the qualifications necessary for the emigrant settler, would therefore be likely to have £15 to £20 at the end of a year's training upon the farm, even if he were quite destitute at the commencement of that time. Any who had saved this amount, or who found in some way a sufficient sum to pay their outfit and passage-money, whether they had been on the Training Farm or not, would possess the first of the necessary qualifications, and could be admitted for examination upon the Trial Farm.

System to be adopted on settlement.—It will now be necessary to determine the steps to be taken to ensure successful colonization with those men who may have passed a satisfactory trial as to their qualifications, but who only have sufficient money to pay their cost of passage and outfit. Every plan of colonization of which the results have been recorded, has apparently been based upon a system of settling a family upon unbroken land, and lending a sufficient amount to bring the property under cultivation. This loads the settler with a heavy debt at commencement; is discouraging because of the hard pioneer work before any return is obtained, and exposes the settler to great hardships in the way of housing on his arrival. When it is remembered that this system has been tried with those who are destitute of any experience to fit them for the work they will have to do, and without sufficient consideration of the isolated life they will have to lead, it would have been surprising if any scheme of colonization on such a basis had proved successful. Experience, however, seems to show that with men who possess the necessary qualifications success can be attained if they are employed only as labourers,

prior to independent establishment. This is the proposal to be now considered.

To carry out this plan the Association formed to assist the colonization would, in the first place, have to acquire a large tract of prairie or uncleared land of suitable situation and characteristics. This area must not be less than ten square miles, and if only of about that extent, should be acquired on such terms that additional areas of adjoining land might be taken up as required. About 2000 acres of the land in a central position should be fenced off, which area would ultimately be brought under cultivation, and worked by the Association as a home farm. The remaining portion of the property should be staked out in areas of 80 acres each. This would be a sufficient quantity for any family not acquainted with colonial farming. It is only one-half the area that can be acquired in Canada as a free grant, but the land would have to be situated in a better position than most of the Government free lands. It will also be better for an intending settler in the first instance to expend his labour and gain some capital from the smaller area upon which assistance can be more readily offered to him. The land having been staked out in this manner, a village should be laid out on a suitable site upon the portion to be used for the home farm. Here should be erected at once a house for the manager; a lodging-house for unmarried men, or those who in the first instance would leave England without their wives; huts to be occupied by the married men, to each of which might be allotted a piece of land to be used as a garden; and a building with accommodation for club purposes, including a room sufficiently large for religious or other meetings. The residential accommodation in the village would be wanted at first for the

accommodation of intending settlers until they were in occupation of their own houses. When the first occupants took possession of the cottages on their own holdings, the tenements in the village would be wanted by their successors, who would be employed in clearing further land, or in doing the cultivation work of the home farm for the Association. In a few years the village would become the industrial centre for the settlers in the district, where the market, stores, creamery, and other factories for farm produce and buildings for other industries would be situated. The site would therefore have to be carefully selected with the view of its future development, and the huts erected should be of a substantial character, giving a reasonable amount of comfort.

The buildings for residence being sufficiently finished to be habitable, future settlers could be received as labourers, their wages commencing from the day on which they began work on the settlement. The sum they are to receive for the first two months should be settled before departure from England, and might reasonably be less than colonial wages, as the men would not be of much use during the first few weeks. An engagement for 10s. per week with board for a man going without his wife, and 25s. per week for a married man with a hut rent free, might be considered acceptable for this short period.

On arrival, all those going out at first would be engaged upon the clearing of the land for the future home farm, completing laying out of the village settlement, and erecting farm and other buildings which would be necessary for future use when the home farm was under cultivation, and some of the settlers established.

During this first period of two months there would be an

opportunity for each man to inspect the area of eighty acres reserved for him. If his experience during this time did not alter his wish to become a settler, as expressed before leaving England, he would remain as a labourer at wages to be then agreed upon. From these wages not less than 10s. per week would be kept by the Association to assist the settler at a later period. The total sum paid should be at least 5s. per week less than the same class of colonial labour in the district; and the intending settler should be fully satisfied with this amount, as he would be supplied with rations at cost price instead of paying the profits of store-keepers, and would further have advantages in companionship and co-operative help in various ways through being a member of the community. On his entering upon this engagement materials for his future house could be placed upon his future settlement whenever he desired it. He would then be employed either upon breaking up fresh land for the home farm, in cultivation work upon the same, or in fencing, breaking up, or cultivating part of his own settlement with the machinery, and perhaps horse labour, provided by the Association. If employed on his own settlement a careful record of the expenditure upon the holding, including the sum paid for his own labour thereon, would have to be kept. The manager of the Association would determine upon which of these classes of labour each settler was to be employed; this would depend upon the capabilities of the man, the season of the year, and the progress of the settlement.

It would first be wise to get a substantial area of the home farm under cultivation, so that it would yield the produce necessary for consumption by those on the settlement. All labour would probably therefore be engaged entirely upon this object until 400 or 500 acres were under

crops. When this had been accomplished, each intending settler could be employed in breaking up and putting under cropping twenty acres of his future settlement. This having been done for all the settlers on the property, those still remaining as labourers and new-comers would be engaged partly in increasing the area under cultivation on the home farm, and partly on the outlying settlements. The intending settler would employ his time, out of working hours, on his own settlement, or in connection with the erection, fitting, and furnishing of his future home. The members of his family would give their labour in this way, unless they found remunerative industrial or other employment on the settlement. The period for which an intending settler would remain a labourer would depend upon the season he commenced work, the area of land he wished to have cleared before taking possession of his settlement, the exertions of himself and family, and economy in his personal expenditure. If he arrived upon the settlement in the spring he would be employed in the cultivation, and subsequently in the harvesting of the crops on the home farm; later in the year there would be breaking-up work, and probably employment in connection with the buildings on the home farm; and in the early spring of the succeeding year he might be assisted to prepare, as before named, one-fourth of his own ground for cropping in that year. If by this time he had saved not less than £30, and considered his house was ready for occupation, he could be helped to take possession of his property. On this plan he would be in possession of his own settlement within one year from his arrival, and ready to take his first crop that year.

The entry by the settler upon his settlement should be effected by his being allowed to purchase the holding for

such an amount as would be sufficient to pay the cost of land, building materials, labour, cultivations, seeds, and all other amounts expended upon the holding. To the sum so ascertained should be added 10 per cent. as a profit, and $7\frac{1}{2}$ per cent. interest for one year. The purchase would be completed by the purchaser giving a mortgage upon the property for this total sum. The 10 per cent. profit would be added to the Association's funds to form a reserve fund, from which any sums could be expended in public buildings or other works for the benefit of the community. In order to make this proposal more clear, it is desirable to take an example. The actual cost of eighty acres of land, with a share of the general expenditure on fencing, laying out village, incidental costs of management, and all other outgoings, might be £25. The amount paid for breaking up the portion under crops (that payment being mainly made for the labour of the future settler himself) might be a further sum of £35. The building materials supplied might amount to £25, these three items together making a total of £85. Adding to this sum 10 per cent. as before named, and $7\frac{1}{2}$ per cent. interest for one year, would make a total of £100. This would be the sum which under such circumstances the settler would have to pay, giving a mortgage for the full amount. This charge would not at first be well secured. It must, however, be remembered that in addition to the materials charged in the above amount, the settler would have put some of his own labour into the property, or paid for the work of others upon the same, while the fact that he was investing the whole of his savings in stocking the farm would be an indication that he intended to remain, and so rapidly increase the value of the property. Judging from the experience of previous

successful colonization efforts, this might be at the rate of from £60 to £100 each year.

In addition to purchase of the holding, the settler would require assistance in order to obtain sufficient farm stock and furniture. He should be provided with two cows, a yoke of oxen, wagon, various general implements, small tools, and house furniture, together with cash for the purpose of purchasing from the Association any growing crops, and for his maintenance until the produce was realized. These items would amount to a total of certainly £90. If he purchased all necessary implements so as to be entirely independent of neighbours, or had a better house or furniture, he might want £130. In any case he should not be allowed to take possession of his settlement unless he had sufficient money to work the farm if supplied by the Association with stock not exceeding in value twice the amount which he possessed. This would involve a loan of two-thirds the working capital, which would be secured by a chattel mortgage. This should be lent upon the condition that during the first year interest should be paid at the rate of $7\frac{1}{2}$ per cent., while the amount lent should be paid off with interest at the same rate by instalments of 20, 30, and 50 per cent. during the next three years.

Much of the difficulty experienced in obtaining the return of the sums that have been lent to settlers under the various schemes of colonization before-named, has been due to the fact that they have not at first been expected to pay back any part of the loan or interest thereon. The result is that they either forget or do not fully appreciate that they are indebted to so large an extent, and feel aggrieved when asked to repay. With the preparation for and assistance in colonization as named, there should be no difficulty in

paying some annual charge from the very commencement. There would not be the same necessity for the repayment of the amount lent upon the land as there would be in the case of the money lent for stock, etc., as the former would be increasing in value. Instalments of this, however, should commence from the fourth year at the rate of 5s. per acre every year. It would be desirable to provide that in the event of non-payment of interest the purchaser should be deemed to have the position and rights of a tenant only, holding at the rate of 10 per cent. on the amount owing. This would afford security to the Association, and at the same time render possession to the tenant certain, provided that he only paid this rental, even if he had neglected to pay the instalments off the mortgage.

There would be men whose work during the first two months was not sufficiently satisfactory to justify their being assisted to become settlers in the manner suggested. These might be mechanics who thought they would earn a better reward by taking skilled work in a colonial town, or they might be those who, when actually brought into contact with the hard work of a pioneer settler, would prefer to take the risks of a casual wage-earner rather than to continue that hard work which is necessary to ensure future success on the land. For such men the home farm worked by the Association would be decidedly useful, affording them a temporary home immediately on their arrival abroad, and this practically without cost to the Association, for if the labour of the men given during their temporary stay on the farm were satisfactory, it would be worth the wages paid, while if not satisfactory no wages would be allowed to be claimed. Then the home farm would be useful to men who, having been trained thereon, might desire to become

settlers on other estates than those owned by the Association. If the farm were in Canada, and the capital under the control of the Association had been exhausted, some of the Canadian railway companies would gladly welcome upon their land a simultaneous settlement of twenty or thirty who had earned some capital and proved their capabilities on the home farm of the Association. The work of the Association could therefore be continued after all the land acquired by them for the small farms had been settled, the home farm continuing its work to some extent by receiving men and assisting their settlement on free grant land or elsewhere. The Association would also sometimes be able to assist labourers to settlements on the original property, as in a few years some of the original settlers would decide to move to larger areas quite undeveloped, where, with the experience they had gained and the capital they would then possess, they would be able to obtain larger profits.

As to the number benefited by such a scheme, it would certainly be undesirable to begin in any one district on too large a scale. If fifty men went out to such a property in the spring, and a further fifty followed in a few months, it would be a sufficient number for the first year. The home farm of the area before-named would require nearly fifty men when in full cultivation, while until that stage is reached a similar number could be employed on the development operations. The development of minor industries upon the settlement, the opportunities of obtaining other classes of labour for settlers, and the various openings which may present themselves to many during the first two months, render it probable that if started on this scale at least 100 men could be annually received upon such a farm, and it would not be improbable that in certain

years the number would reach 150. The amount of capital necessary will be referred to in Chapter IX., but the financial aspect, both from the view of the Association and the intending settlers, should be here mentioned.

Finance of suggested system.—It will be seen that the Association promoting the colonization will practically be carrying out two different branches of work, namely, that of a Land Development Company, and that of a company farming for its own benefit. As far as the development is concerned, the Association would adopt the ordinary means of clearing and use the most economical machinery in the same manner as any other Land Development Company would do. As regards the manual labour, it would, however, have an advantage, for it would have the services of these future settlers, who had been especially selected and tested in England, at less cost than ordinary colonial labour. This would make the total cost of the development work considerably less than usual. Then the Association, being to a certain extent a public movement, not carried on for the sake of profit, would have command of the best advice and many advantages in the selection of land, and possibly special assistance by loan of capital from the Government. But by far the greatest advantage it would have over most Land Development Companies would arise from the fact that when the land was developed and increased in value, there would be the men ready to take up the farms at fully the amount spent upon them as soon as they had sufficient means to take this step. It is thus evident that the Association would be under more favourable conditions than many Colonial Land Development Companies which undertake successfully and profitably the clearing and re-sale of land. The working of the home farm could scarcely fail

to place the Association in a still stronger financial position. Conditions would be favourable both for economy in working the farm and for the realization of the produce. The cases of large farmers in any of our colonies working with sufficient capital and not making profits are quite exceptional. Companies undertaking farming are not so frequent as Development Companies, but one of the most recently formed, and working about 2500 acres in Canada, was able to declare a dividend of 15 per cent. for its first year ending March 1892. Upon this farm forty to fifty labourers had been employed at wages averaging 38s. per week each.

As far as the settlers were concerned, their advantages would be great in comparison with the positions they would hold if placed upon independent settlements at once. They would have a certainty of employment on arrival on better terms than they could get in England, and while engaged on those terms might find openings in the new country which they would prefer to taking up land. Then those who after actual acquaintance with the property were confirmed in their intention to become settlers, would be assisted to do so, and avoid the difficulties of the pioneer settler on unbroken land. It is true they would not get free grants, and it may be thought, moreover, that the price to be paid, based upon the principles before explained, is too much for the property. As to this point, however, it should be remembered that an Association taking up such a work would obtain land on special terms in consequence of a village being settled in the manner suggested, thereby increasing the value of the unbroken land in the neighbourhood of the settlement. Therefore, even adding the cost of laying out the village, and the profit before-named, the original cost per acre would be possibly less than the

amount for which an ordinary settler could obtain similar land in its original condition. To this price would be added nothing beyond the cost of materials supplied on the holding and the cost of the work done thereon. The sum the latter would amount to would depend mainly upon the manner in which the intending settler had done his work when employed as a labourer on his future settlement. If he had wasted his time, or not done the work thoroughly, the cost would be higher than otherwise. This would give some inducement for honest labour, and render it possible for the work to be carried on with less supervision than would otherwise be necessary.

Such seems to be a practical scheme of colonization for men possessing little or no money, and one which seems to avoid the difficulties and errors which have led to the non-success of former efforts.

Summary of proposals.—To briefly recapitulate this plan of colonization, it will be seen that it includes first a practical test in this country as to the qualifications of an intended settler ; secondly, his employment abroad for a short period so as to enable him to see what the conditions of life and work are before he finally decides to settle upon the land ; thirdly, if he so decide, his employment as a labourer on general farm work and also on preparing his own future settlement, the greater part of his surplus wages being retained in order to assist his independent establishment ; and lastly, providing him with such addition to his savings when they reach a sufficient sum as will enable him to start as an independent settler under satisfactory conditions. The Association carrying out this proposal would be safe in doing so, for only men possessing the necessary qualifications would be taken abroad, and the land could, by their labour,

be cheaply developed and the farm worked with good profits. To the men becoming settlers, the farm would give training, companionship, a certainty of a living, and the minimum amount of discomfort which every new settler must experience.

But the question will very naturally be asked, Are there any men possessing the necessary qualifications willing to go through this course of preparation before being placed in possession of their land? On this point experience has been gained. Many of those who have become settlers under previous colonization schemes would not have done so ; but this very fact explains one of the causes of failure of those schemes. The Hadleigh Farm Colony, the only organization taking the work of the training suggested herein, has given experience in this direction. The greater number of the men coming there had no wish to gain an independent life ; some were irreclaimable tramps, others objected to work, many did not desire to go abroad, but within six months of the starting of that work it appears that there were fifty to eighty men of good character, both physically and in other ways complying with the qualifications before-named, who were willing to emigrate to be settlers on colonial land. If also we look at the work of the Emigration Agencies which have latterly sent so many abroad, or peruse the reports of those who have been assisting this work, we must admit that there are men who would offer themselves to pass these tests, and who by such an organization as here suggested would be materially assisted in their future life abroad.

Situation of settlement.—Some may urge that difficulty will be found in obtaining land with the necessary characteristics. It is true the conditions of the colonies are

different now from what they were a few years ago, and many of the best positions have been taken up. At the present moment there is one colony, however, which possesses special advantages for settlers without capital, namely, British Columbia. The resources of that country are being rapidly developed, are so varied, and the climate so favourable, that it appears to offer attractions to settlers which no other part of the world can do. In Manitoba and the North-West Provinces of Canada there are still openings for those who are prepared for the climate and the purely agricultural work they will there experience. In some parts of Queensland there are large areas favourably situate for general agriculture, but in other Australian colonies there is but little unbroken land which could readily be made profitable. In New Zealand almost all the most accessible parts are already taken up, but the great future development which there may be in the manufacturing and mining industries of that country will give good openings there in the future. Moreover, village settlements such as have been recommended are specially assisted by the New Zealand Government. In South Africa there appear to be no special attraction except to capitalists, and the uncertain rainfall in most parts renders the country unsuitable for purely agricultural settlements.

In any case the land selected for a settlement, in whatever country it is situated, must possess certain local qualities and characteristics. It must have inherently good soil, good access to water, healthy sites for dwellings, and plenty of timber. In making the selection consideration must also be given to such matters as the assistance offered by colonial governments, the cost of passage-money and up-country expenses from England, the nature of the climate, the

presence of coal and other minerals, the possible development of fisheries, the access to future rail, proximity to a probable future populous centre, existence of natural resources which might be used in manufacture or in other ways, and numerous other points of a varied nature.

It is agreed by all that good openings are now being rapidly filled, and that anything done on a large scale should be done without delay, or valuable opportunities will be lost. Cannot we therefore see at once an independent Trial Farm established as an institution worked for the use and benefit of all who wish to be examined and tested? As to the settlements, it would be obviously desirable to have various small efforts in different countries rather than concentrating all the work on one larger settlement. There would be different conditions existing in each, varied seasons which would allow of interchange of products, and different countries and persons interested in their success. If these properties were first acquired they perhaps would be best situated in British Columbia, in one of the nearer provinces of Canada, and in New Zealand. Later on others might follow in Queensland and South Africa. With these all gradually extending and forming centres for the supply of competent trained labourers or settlers in the respective countries, something practical might be accomplished in bringing our men back to the land under conditions favourable to themselves and beneficial to the empire, and in that way to some extent the pressure of competition for work in the old country would be relieved.

The amount of capital necessary for the development of these proposals will be dealt with in the next chapter. It will be there shown how, after consideration of the financial and other details with many who have been actually engaged

in land development and colonization, it appears certain that £18,000 will be sufficient to commence successful work on three settlements of the character suggested, provided that not more than 100 workers be sent to each during the first year. A further sum of £12,000 would then be sufficient to meet future needs.

CHAPTER IX.

FINANCE OF THE SCHEME.

WE now come to consider the practical means by which a scheme of the character suggested in this book, having for its objects the training of men in agricultural work and the establishing them upon the land, can be carried into effect. This object could, it is suggested, be achieved by the formation of a national organization uniting together under one control a Training Farm, a Home Settlement, and an efficient scheme of Colonization on a basis capable of indefinite extension. In the formation of such an Association there are four practical questions to be settled. These are—(1) the amount of capital that is necessary; (2) the interest likely to be paid upon the same; (3) the manner in which the capital can be obtained; (4) how such an organization could best be founded and governed.

Capital for the training farm.—If we assume that an estate acquired for the purposes of the Training Farm consists of 1200 acres, one-half of which would be improvable land, it will be possible to estimate the amount of capital required for the development and working of such a property on the lines already indicated.

The first expenditure to be provided for after the acquisition of the land would be that to be made in the erection of

buildings. Those necessary for the residence of the 200 men who could be received upon the property would cost not less than about £3500. The experience gained in the housing of large numbers shows that this sum would be sufficient to provide comfortable accommodation and also to fit up and furnish the buildings. Then there would be cottages for foremen, and additions and alterations to existing farm-house and farm-buildings. For these purposes £2000 might be necessary. The capital for working the farm would next include provision of implements and live stock, with sufficient cash to pay all farm expenses till the following harvest. This could be readily calculated as soon as the farm was chosen, and probably if not more than 600 acres were in cultivation £4000 would be sufficient. The greater part of the work upon the improvable land would be done by those men who were maintained upon the produce of the farm, but who were not required to carry on the cultivation work. This, however, could not be the case in the first year. A sufficient amount of capital should then be in hand for the maintenance of the whole number of men for that period. This would be about £4000. Another branch of capital expenditure would be in connection with the indoor industries. A sufficient sum must be provided to erect workshops, to provide all tools and appliances for employment in the various directions named in Chapter V., and to enable the resulting products to be purchased and kept by the Association pending satisfactory realization. This sum is estimated at £2500. The several items mentioned give a total of £16,000, exclusive of the purchase of the land. The land might cost nearly as much, and it would therefore be unsafe to estimate that such a Training Farm could be founded with a smaller sum than £30,000.

This amount, in the opinion of the writer, would prove sufficient, though the Hadleigh Farm Colony for similar purposes cost more than double that sum. (See page 214.)

It should not be forgotten that Ireland has special suitability for the purposes of the Training Farm. There are many properties in that country consisting of mountain or bog land which has been partly reclaimed, but where through lack of capital the reclamation has been stopped and could be profitably resumed. The reclaimed portions of such properties are, generally speaking, already tenanted in small holdings, and therefore not available for the purposes in view. But this is not invariably the case, and the writer, when in Ireland in January 1892, noticed at least one suitable property. There are various reasons why land in Ireland might be selected. The investment of English capital would be desirable for the country ; there are fewer burdens upon land in Ireland than here ; the cost of provisions is less ; there is a lower standard of living in the country districts ; and lower wages to the Irish labourer. These, with the special opportunities which exist in Ireland for obtaining loans from the Government at low interest, would be great advantages to the Association. It would also be beneficial for the men sent upon the farm to be far removed from their lazy comrades, their old habits, and the temptations of town life. On the other hand, as an Irish property would be less readily accessible to those who had subscribed the greater part of the capital, it may be assumed that less influence would be brought to bear for the furtherance of the work ; the property when improved would not be so readily saleable as if it were situated in this country ; the land would not be considered by some to be held on so safe a tenure ; and there would be additional expense in

placing men upon the property. These disadvantages would more than balance the advantages, and the first Training Farm would have to be acquired in England, though such a property would not give so much employment in rough reclamation work. When, however, the first Training Farm had been found successful, then property might be acquired in Ireland, and be used specially for those men who desired to settle in the future on land in a new country. The examination upon such farm would be most useful to those large numbers annually leaving Ireland for less crowded districts, and would much assist them in their early work abroad.

Capital for settlement farm.—We now come to the question of the Settlement Farm. It may be asked, Why should men receive their experience upon one farm and then be removed elsewhere if they wish to continue getting their living from the land? The principal reasons are—(1) a farm at a sufficiently cheap price and possessing the necessary characteristics for a Training Farm could not usually be obtained in such a position as would be desirable for a settlement; (2) when first coming into the possession of the Association a comparatively small area would be of sufficiently good quality for small holdings, and such area would be wanted to grow the produce necessary for the maintenance of the unskilled men; (3) it would be undesirable for settlers and labourers to be on the same farm if it could be otherwise arranged; and (4) it would be difficult to satisfactorily settle a system of apportionment of rental of the Allotment Farms on land so varying in character as would be found upon an improvable farm. It would, therefore, be desirable to have a separate farm for the independent establishment of men, though there would be advantages in having the two in the same district.

At the end of two or three years, however, the main disadvantages of the Training Farm for the purposes of settlement would disappear, for by that time the Training Farm, having been worked by hand labour, would have been brought into a good condition of cultivation and much of the improvement work carried out. Then settlers could be gradually received on some portion of it, the revenue still remaining practically the same by reason of fresh land being brought under cultivation and improved. This process would continue till the whole of the rough work which could be profitably undertaken on the Training Farm for testing and training the men was completed. Then another improvable farm would have to be obtained, and the original Training Farm, which would thus have been brought up to its highest condition of productiveness, could be entirely used for independent settlements.

It would be most desirable to obtain the Settlement Farm at the same time as the other, for though no men would be ready to go upon it at once, the cropping would have to be arranged a year in advance if the settlers were to start successfully. Assuming possession of both farms were obtained at Michaelmas, it would be necessary to commence cultivations at once on the one intended for the settlements. The land would be ploughed after harvest and worked on the ordinary system, but before the wheat was sown, it would be necessary to lay out the respective future lots, so that the wheat might be sown only on those parts of each allotment which would be wanted for wheat-growing in the first year. Then, in the spring months, the spring corn and roots would be put in as best arranged for the respective Allotment Farms. The ordinary labour upon the farm would begin to be dispensed with as the qualified men gradually came

from the Training Farm to take possession of their respective holdings. Having taken up residence at the farm-house on the basis explained in Chapter V., the first work on their own properties would be the hoeing of the growing crops, the remainder of their time during the early summer months being occupied with this work, and laying out and planting the areas allotted to them for gardens. Each tenant would harvest his own crop in due season, and at Michaelmas would pay from the proceeds of same a valuation for the growing crops at entry. Meanwhile cottages could be erected upon some of the farms during the summer. This would be the most satisfactory method of entry and establishment, and would enable a good man and hard worker, coming to the Training Farm in the autumn, to be independent in his own cottage within a year.

It will be seen that this method during the first few months will only necessitate about the same amount of capital as would be wanted for an owner working his own farm. Before the following autumn increased capital would have to be provided in order to find the tenants the increased stock which the farm would carry when worked in small holdings. Although all the capital will not thus be wanted at once, it is necessary to consider the maximum that may be required. In the first place, if we take an area of 300 acres, the purchase-money, with repairs, improvements to buildings, and construction of roads, would probably be £7000. The next expenditure would be the erection of the factory buildings and the cow-house, dairy, and other small new buildings; the cost of these might amount to £3000. The capital for farming the property for the first year would be £2500, but after then might increase to £4000, though it would never exceed that figure. It must

be remembered that the tenants would be gradually reducing their loans, and at no one time would the maximum sum be lent to every tenant. There would be forty to fifty tenants, but some would be living three in one cottage, or residing in the farm-house, as previously explained. Probably, therefore, about twenty-five cottages would be sufficient, and allowing £160 for each of these, with the sheds attached, the cost of this number would be £4000. A further sum of £2000 should be left unappropriated, which might be wanted for assisting technical education, developing home industries, or utilizing any natural resources which the property might be found to possess. These amounts together would make a total of £20,000, which would therefore be the sum necessary for founding a home settlement upon this basis.

Capital for colonization abroad.—Coming now to the proposals made for foreign colonization, it will be remembered that the suggested scheme is to obtain a sufficient area of uncleared land possessing the necessary characteristics, to provide shelter thereon for the colonists, to employ them as labourers in clearing the land, to work some portion of the land as a home farm, and subsequently to allow the colonists to acquire settlements on the outlying portions. To carry out these proposals, sufficient capital is necessary to take up the land, to erect the village buildings, to maintain the men for the first year, to work the home farm, and to find the amount necessary for loans to maintain the men upon their holdings when they are established independently until they can obtain produce from their own land. A suitable property could probably be taken up, practically free, or in any case on a deferred purchase system, so that a sum of £500 would be a sufficient amount to allow for the acquirement of the estate. The village buildings could be

erected, and machinery and appliances provided at a cost of about £1500, if the labour of the intending settlers were employed to a large extent. During the greater part of the first year there would not be more than fifty men employed, unless possession were obtained sufficiently early to harvest a crop in the same year, in which case more men might be employed, the produce of the crop going towards their maintenance. Under these conditions £3500 would be sufficient to provide wages and salaries for the year. A further £500 would be sufficient for the initial expenses of the home farm, making a total amount of £6000 for the first year. A further sum of £3000 would, however, be wanted before the end of the second year, either in payments to the men, or to purchase implements and stock for them. An additional amount of £1000 would also be required for implements and working capital for the home farm. No further sum would be needed for this last purpose, as the returns from the home farm, as its area was increased, would be sufficient to find all the additional working capital which would be necessary. Commencing in this manner, the colonial settlement would be continually increasing in value, though the number of men it could annually receive would be dependent upon the actual speed of development. The various sums named amount to a total of £10,000, but, for the reasons given on page 166, if the proposal is to be carried out, it would be unwise to restrict the work to a settlement in only one colony, and three settlements might, in the first instance, be established in different colonies at a total cost of £30,000, taking 100 men on each settlement.

It will be seen that this total, after deducting the sum of £1500 estimated as being necessary for working the home farm on each colony, amounts to only £85 per head

for each colonist. This amount is lower than the sum expended in any other effort which has been made at colonization. Even remembering that the cost of passage-money, etc., is paid by the colonist, and not included in this sum, it would be impossible to effect colonization with so small an amount except by employing the intended settlers as labourers on their arrival. In addition to effecting economy of capital, such plan has the further advantages noticed on page 162.

Security for the capital.—It will thus be seen that the capital required to ensure successful establishment of the training farm is £30,000; of the home settlement, £20,000; and of three foreign colonies, £30,000. It is now necessary to consider whether the total sum, amounting to £80,000, could be safely used in the manner proposed, and the way in which interest could be paid upon the amount.

Taking into consideration the nature of the security offered by the properties which would be acquired, it may be considered that such security is of three different kinds. Firstly, there would be the security afforded by the farms and the amount to be expended upon them for profitable improvements. As nothing beyond a saleable value would be given for the estates, and nothing in the nature of improvements would be sanctioned unless it increased the productive powers and saleable value of the land to a larger extent than the amount expended, it is clear that the value of the farms would be a good security to the amount of that value. Secondly, there would be the buildings. The greater part of these would not be saleable at cost price, being special buildings practically of little use for any purpose other than that for which they were designed. The part of the capital invested in these would not, there-

fore, be well secured. Thirdly, there would be the capital provided for the purchase of the necessary plant, machinery, and implements, for working capital, and for loaning on security to tenants. This capital would be subject to diminution by depreciation or loss. In accordance with the foregoing estimates, the £80,000 would be laid out as follows—

	£	£
Land and improvements on training farm	18,000	
Farm for home settlement	7,000	
Land and improvements, three colonial estates ...	21,000	
	<hr/>	
Total security of the first kind		46,000
Cottages, etc., on training farm	2,000	
Buildings for housing men on same	3,500	
General buildings on home settlement	3,000	
Cottages on home settlement	4,000	
Buildings on colonial farms	1,500	
	<hr/>	
Total security of the second kind		14,000
Working capital on training farm	6,500	
„ „ for home settlement	4,000	
„ „ for colonial estates	7,500	
Amount unappropriated	2,000	
	<hr/>	
Total security of the third kind		20,000
		<hr/>
Grand total		80,000
		<hr/>

In the event of immediate realization, it might be assumed that the £46,000 would be returned; that one-half the expenditure on the buildings, or £7,000, would be lost; and that the depreciation on plant, etc., and diminution of working capital, might show a loss of £5,000. The fair realizable value of the property would thus at first be perhaps £12,000 less than the cost.

This looks unsound, but consideration will show that the increasing value of the properties will speedily make up this

deficiency. In the case of the training farm there will be the value of the work done in the nature of permanent improvements, in addition to the increased value owing to the higher cultivation of the better portions of the farm. In the case of the home settlement, the increase in value would not be so substantial, but at the same time, as the land cultivation was extended the increase would be considerable. The greatest profit would, however, be made in the case of the foreign colonies. Here there would not only be the actual increase in value, but the receipt of a portion of same in cash from settlers on the sale to them of their farms. There are few colonial land settlement companies that have not been able to declare large dividends, and, for the reasons given on page 161, it would be strange if this organization were not equally successful with the companies usually undertaking this class of work. Therefore, although at first the assets of the Association, if realized, would not replace the amount of capital invested, it will be seen that in a few years the increase in the value of the land would more than make up the losses in buildings and depreciation, and at a later period, mainly from the sales of land on the colonial settlement, a substantial reserve fund could be created.

There are few ordinary companies carrying on an industrial business which would not show a greater loss of capital if the business were stopped for any cause and assets distributed. But this forced realization would be so unlikely a contingency that many investors would not give so much consideration to this point as they would to a more important question, viz., the manner in which an annual income would be secured from which a dividend on the capital invested could be paid.

Revenue from each department.—The sources of income will, therefore, now be considered. As already noticed when referring to the Training Farm, this property would first be charged with a rent calculated at the rate of 4 per cent. on the cost of the land. It would be further reasonable to charge 5 per cent. interest on any sum spent either upon the buildings or for the landed improvements. Any ordinary tenant would be glad to pay this last-named interest as additional rent. The interest on the working capital should be charged at a higher rate, and 6 per cent. upon the amount so used should be added to the rental, the whole to be a first charge on the returns of the farm. On this basis the rent on the assumed cost of the 1200 acres forming the farm, viz., £14,000, would at first be £560 per annum; and when the land improvements, involving capital expenditure, were completed, and farm cottages and buildings erected, the rental would not exceed £950 per annum. Interest on the working capital for the farm would be a further annual charge of nearly £250. On reference to Chapter V., it will be seen that this total sum is to be paid out of the returns of the farm, and will be retained for the purpose of paying interest to those who have found the capital. This retention will be made before any men in excess of the number necessary for actual cultivation work are maintained upon the property. In addition to this rent and interest on working capital used in farming, there would be a rent from the workshops of 4 per cent. upon their cost of erection, and 5 per cent. interest on the amount of working capital used for the same. This would be deducted before the profits of the industries were divided to the labourers. In addition to the income from the rents and interest named, there would be an annual

increase in the capital value of the property by reason of the hand cultivation, which increase in value would improve the security of those who had found the capital, although not available as income.

In the case of the home settlement, it will be seen on reference to Chapter VI. that the annual sum to be paid by the settlers is to be assessed upon the basis of 4 per cent. by way of rent upon the cost of the land and buildings, and $7\frac{1}{2}$ per cent. upon the sum lent to tenants. In addition to the annual sum so paid, the Association would receive from the home settlement the profit from working the factories, from the grass land, and from any portion of the farm remaining in hand. The profit from the last-mentioned source would not be certain, as the expenses of farming the land in hand would be heavy owing to its varying area, but the other two sources of income would be reliable. The rents from the tenants would be fully as secure as rents becoming payable under an ordinary tenancy.

As to the revenue from the colonial settlements, it would be reasonable for the home farms on those settlements to be charged with $7\frac{1}{2}$ per cent. interest on their cost, and on the working capital employed thereon. As already stated in Chapter VIII., the settlers would pay at the same rate for any capital used by them. Then there would also be profits from any factories or industries which were organized; or from stores which it might be desirable to establish; with rents from buildings, cottages, or gardens forming part of the village. There would also be profit from the improving nature of the land. This, as mentioned in Chapter VIII., should go to capital account and create a reserve fund. In addition to the interest on capital, there would be farming profits from the home farms. These, like those of the Training Farm,

should not be divided as dividend, but would be used solely for the support of additional men, thus extending to the utmost the work of the Association, and increasing the development of the property. Nor should the 10 per cent. suggested in Chapter VIII. as the profit to be charged on the sale of land to the settlers be divided as income, for this would have to go towards the cost of erection of additional buildings, or be used to meet other capital expenditure.

It will thus be seen that the training farm, home settlement, and foreign colonies will each be yielding rents or interest for the capital employed, in addition to profits in certain departments increasing the capital values. In addition, under certain circumstances returns might be expected from quarrying of stone; working of mines; sale of chalk, gravel, or sand; cutting and sale of timber and underwood; and exercise of sporting rights, such as fishing and shooting.

System of management.—In order to determine what dividend could be paid to those finding capital of the Association, it is necessary to consider the basis upon which it would be formed. A large portion of the necessary capital could be obtained upon mortgage at a low rate of interest if that course were desirable. It might, however, be better that the Association should have an influential Council, and obtain the £80,000 necessary for establishment of the work in every department by an issue of shares and debentures. Assuming the amount were thus obtained and spent in the manner suggested on page 177, the income from rentals and interest on working capital would be over £4600 a year, and a further sum of from £500 to £1500 a year would be derived from the other sources of income above specified. If one half the capital of the Association were raised by the issue of 4 per cent. debentures, and the

other half by the issue of shares, a sum of £4000 would meet the annual interest on the former and pay a dividend of 6 per cent. on the latter. There ought to be no difficulty in effecting this if economical management were exercised.

The economical management could best be secured if every member of the Council of the Association was actively interested in the objects to be achieved. The Constitution of the Association might provide that every shareholder taking not less than £250 in shares should become a Governor. The Council could then be formed of the Governors, with a certain further number of shareholders elected at a meeting of the Association. The Council, which would act without payment, would appoint Executive Committees to deal with the various departments of the work, the members of which Committees should be mainly appointed from the members of the Council, but with the addition of any persons whose experience was considered useful in connection with the special affairs of the Committee on which those persons were elected to serve.

If this system were adopted, there would be at least three Executive Committees. First there would be a Committee for supervising the training work. This Committee should be constituted of those who were specially interested in rescuing and providing work for men. It would be responsible for the supervision of the Training Farm; for securing employment for men volunteering to work; and for assisting such men by loans, organization of technical education, or any other desirable means. The Home Colonization Committee would consist of those who had given special attention to means for rendering the land of this country more productive than at present, or who had considered ways in which rural industries could be revived or introduced.

The third Committee would be for the Foreign Colonization work, and would comprise those who were interested in our Colonies, and who had done previous work in connection with Colonization or Emigration. This Committee would have the control of all matters relating to the training and equipment of men in this country who had determined to go abroad, the making of such arrangements as would assist them in their work when there, and the developing of the Colonial Settlements in the most profitable manner.

But are there competent persons prepared to join such Committees? Experience has shown that such is the case. There are many who have already given their money and time in assisting the work which it is suggested should be under the control of the Committees first-named. As to the second-named, leaders of public opinion have shown their practical sympathy with proposals for assisting the establishment of a larger number of men than are already engaged upon the land of this country, and with the promotion of rural industries. This is shown by the fact that they have become members of the Committees of such Associations as the "Rural Labourers' League," the "Home Colonization Society," the "Society for the Promotion of Rural Industries," and other organizations with similar objects. When also we see the great interest taken in Colonization since the issue of the Report of the Parliamentary Committee upon that subject, and the time and experience generally given by honorary workers in connection with various Emigration Societies and Colonization schemes, there can be little doubt that a competent Committee would be obtained for the Foreign Colonization Department.

With the Honorary Council and the special Executive Committees there would be none of the heavy expenses

usually attendant upon the management of a Company, Probably £500 or £600 a year would be sufficient to pay the secretarial, clerical, and supervision expenses; for although the work undertaken would be varied and on a wide scale, it would be of a character which could be undertaken by the Committees. There would be heavy preliminary expenses in connection with the selection and acquirement of the properties of the Association. These expenses would comprise Legal charges; Valuation of land and stock; Preparation of plans for buildings; Consideration as to desirable improvements and laying out the same; Surveying charges, laying out roads, and staking out boundaries, and General organization. Having in view what is done for other Societies, no doubt a great part of this work would be taken by honorary consulting professional advisers. The actual office, clerical, and field work, must however amount to a substantial sum. The cost of this would have to be charged to the capital account of the respective properties involved, as being expenses incidental to their acquirement.

But there would be a possibility of founding the Association on a still wider basis and without shares. This might be done by having an unlimited number of life and annual members, whose subscriptions would be used for carrying on the propagandist work and the departments of the Society not involving substantial capital expenditure. Such departments might include the formation of a reference library, containing all the English and foreign publications bearing upon the intensive cultivation of the soil or profitable rural industries; the foundation of a museum containing the products of British, Irish, and Continental Cottage Industries and appliances used for producing them, or models which will illustrate the same; the provision of some means of

union by which landowners and tenants can be brought into communication with each other for the purposes to be more fully mentioned in the next chapter; the carrying on of an experimental farm, where the results of intensive cultivation could be shown, and those wishing to get a living from the land could be tested as to their ability and experience; and lastly, the foundation of an advice bureau for giving advice and assistance to all who wish to commence a rural life. If such an Association were formed, the necessary capital for carrying out the main work would be raised by the issue of debenture capital secured upon the properties acquired by the Association.

Probability of obtaining capital.—It will not be reasonable to look for State Aid until the proposals for training men and establishing them upon the land which are discussed in these pages have been shown to be capable of being successfully put in operation upon a large scale. Nor would the work be likely to be so successful under State supervision as if directed by those who have already shown their interest therein by giving their time and money to accomplish something in this direction. Private and individual attempts have already done something, but if these attempts be now combined under a general scheme such as herein suggested, practical and successful results will be more likely to follow. Then would come a time when our Poor Law System would be altered and improved, and work would be provided for the unemployed in the place of relief. Such a result would be of great benefit, not merely to those assisted, but also to all ratepayers.

It may be thought by some that the capital I have shown to be necessary is too large to be capable of being raised. On this point it may be well to recall the fact

that the London County Council have recently spent over £20,000 for providing a lodging-house on improved principles for the accommodation of only 300 men. A sum of about £20,000 has been spent on nothing beyond the erection of an infirmary attached to the Union of the district in which the writer is resident. A new lunatic asylum has also been erected for the same county at a cost of nearly £70,000. Large sums can thus be obtained for such public works when they are considered desirable. Surely, therefore, money could also be raised if it were to be used for work certainly productive of revenue, especially when we remember that the property obtained would not only increase in value, but that the working of it would give unemployed men a chance of earning the maintenance they would otherwise only get by becoming dependent upon public or private charity; would afford the best possible test as to whether a destitute man was a lazy tramp or an honest worker worthy of future assistance; would provide an opportunity of assisting the latter to gain an independent life in the future; would increase the production of our English land; and, lastly, would be certain to lessen the cost of Poor Law Relief.

If the possibility of raising the necessary capital from private persons be considered, then, when we see such instances as that of Mr. Bolton King, who provided over £8000 for experiments in Co-operative farming in Warwickshire, and Mr. William Lawson, who, as already noticed, found over £50,000 for working farms in Cumberland—it is at least probable that there are men of wealth who would be prepared to use their money for such a scheme as is here suggested, bearing in mind the benefit which must result in the future and the little present risk.

Lastly, there would be a method of raising capital by co-operation of existing efforts. There are at present the Home Colonization Society and the Salvation Army, each with a colony dealing with men unskilled in agricultural work ; the Test Farm at Audley End, giving training for emigrants ; various attempts by private individuals to settle men in some form upon land at home, purchased for that purpose ; and properties in our colonies lying undeveloped, and belonging to Societies, part of whose object is assisting Colonization. Some of these efforts have proved partially successful, and require additional capital, so that they might be extended. Others cannot carry on further effective work without increased funds. In any case much would be gained in the unity of such efforts. Might it not therefore be found possible to form a National Colonies League? The capital at first might be, as before named, divided into shares and debentures. But instead of an appeal being made to capitalists to take up the former, let the same be taken up by those now concerned in existing landed work, taking shares to the value of the property that they hold, assigning the same to the League. Special powers could be reserved by those now interested as to the future management of their properties, and arrangements agreed to by which those properties might subsequently become independent of the League, if those who had found the original capital wished to take that course. The shares having been so issued, the debentures would no doubt be taken up. Thus both capital and united action would be secured.

Then when the League had been formed and showed that a rental and interest on capital could be paid, many landowners would be willing to assign their property for its operations, thus rapidly securing an increase in the work.

CHAPTER X.

AID TO THOSE WHO POSSESS CAPITAL AND SKILL.

HITHERTO we have mainly considered proposals for assisting back to the land those who are now destitute and possess no farming knowledge. Some suggestions, however, will be given in this concluding chapter as to various means which could be immediately adopted for assisting those who have capital and who already possess farming skill, but are unable to obtain the land which they want.

There can be no doubt that at the present time there is a large demand by agricultural tenants for small holdings, favourably situated for dairy purposes. It is within the writer's experience that out of over 250 applications in a single season to rent farms, probably over 100 were for small farms of about 50 acres adaptable for dairying. The experience of other land agents points in the same direction. The greater number of these intending small tenants are those who have been working larger farms under the ordinary conditions. They probably remained farming in spite of their losses, until want of capital forced them to give up their old holdings, and they now desire to take a small but more profitable dairy-farm. Some of this class, however, are sons of farmers and others possessing some capital and a knowledge of farming, and who wish to commence dairy-

ing believing it to be the only class of farming now remunerative. As will be seen from page 75, in the opinion of the author such tenants have a reasonable chance of success. They, however, almost invariably hold the idea that dairying can only be successful on grass farms, though these are not readily obtainable.

Arable dairying.—In order to facilitate such small farmers being established, it is necessary to show in the first place the means by which dairying can be profitably carried on with arable land; and, secondly, some way in which landowners can subdivide their properties in such a manner as to secure this class of tenants without risk.

It is generally admitted that we must attempt to grow an increasing amount of dairy produce, for which we have so good a market at home; but in consequence of the English system of pasture dairying, it seems generally to be assumed that no increase in dairy production can be effected without a corresponding increase in the area of permanent pasture. This view is erroneous. The manner in which milk can be produced from arable land upon a small scale is shown in Chapter III., and the results of the system, if adopted on a large farm, are referred to on page 84. As, however, it is a matter of importance to small tenants that the system should be extended, it will now be mentioned in greater detail.

Profitable dairying upon arable land rests on the principle of the growth of heavy forage crops at such seasons as will keep up a supply of food throughout the entire year, either in fresh or dried condition. There are many plants of recent introduction which render this a plan far easier to adopt than was formerly the case.

There is an increasing variety of perennial plants which

give heavy crops at repeated cuttings during the summer months. Lucerne is the best known of this class, and on almost every soil thrives luxuriantly. Its yield during the first three years is progressive, and after that time in almost any conditions may be estimated to yield over twenty tons of green produce per acre. Both in its green condition and as hay it has been proved to be a most useful food. Comfrey is another plant, which, when once established, gives a large annual produce, probably in favourable seasons of fifty tons per acre. It is not, however, generally liked by stock, and in the experiments the writer has made in feeding cows upon it, though the quantity of milk was satisfactory, the butter fat did not reach a satisfactory percentage. The flat pea (*Lathyrus Silvestris*) is of still more recent introduction, and if of good strain seems to give specially favourable results. In most careful experiments made at the Agricultural College at Cirencester with reference to this plant, in its first year it gave produce at the rate of $11\frac{1}{2}$ tons per acre, and in its second year (1892) over 18 tons, while other records of growth have shown much higher yields. As to the feeding properties of this plant, the experiments and analysis at Cirencester showed it to be exceptionally rich in nitrogenous matter. If not eaten green, its character of growth renders it better suited for ensilage than for hay. Of the same character, but not so permanent, is the Hungarian forage grass, which gives heavy yields at cuttings through the summer, and is especially suited for dry, sandy soils. Another permanent crop which experience has shown to be specially valuable for increasing butter is furze; it has to be cut young, and bruised with a breaker before being fed to stock, but in certain situations is well worthy of cultivation. Lastly, among these permanent crops is sainfoin

which, in some cases on suitable soil, will give as good a yield as lucerne, and makes valuable hay.

One of the newest and most useful of the annual crops for dairying is maize. Sown at the end of May or early in June, in damp situations with good subsoil, it will yield heavy crops in August or September, either for feeding green or making into ensilage. Tares sown in spring will give useful food during the same season. Then for feeding in early spring, rye grass and winter tares can be sown in the autumn. Various descriptions of cabbage can be grown so as to afford a supply of that food for at least nine months in the year. When used with care and mixed with other foods, this class of crop has no detrimental effect on the quality or yield of the milk. When it is remembered that in addition to all these crops there are turnips, swedes, mangel, clover, trifolium, and other varieties of annual grasses as ordinarily grown, it will be seen that, with sufficient labour, produce for feeding cows can be raised of enormous variety and of far greater weight, and consequently of feeding power, than from meadow grass.

Having regard to these facts we may, therefore, safely advocate an extension of dairying in England, relying more on our arable land for this purpose. If we look abroad we see successful dairying there carried on under this system. Denmark is a country which has changed its system of agriculture, being formerly dependent upon corn crops. The exports of butter from this country for the year 1891 exceeded 100,000,000 lbs., 98 per cent. of this quantity being sent to England. Twenty years previously the weight exported was less than 20,000,000 lbs. The proportion of permanent pasture has actually slightly decreased during the same period, it now representing about 37 per cent. of

the cultivatable area. In Belgium, with 5,500,000 acres of land under cultivation, only about 950,000 acres are permanent grass, and yet this country raises at home all the dairy produce necessary for its home consumption. In France the area of permanent pasture is about 12,500,000 acres, while the number of cows in milk or heifers over two years old is stated to exceed 6,500,000. If we compare these figures with those of Great Britain in 1892, we find that in this country there was an area of 16,350,000 acres of permanent grass with only 2,650,000 cows and heifers. In Jersey it is considered far too wasteful to feed cows exclusively on grass when arable land has been proved to be capable of maintaining a much larger stock. From the returns of 1892 for this island it appears that out of the cultivatable area of nearly 20,000 acres, only 4000 are permanent grass, while there were 7100 cows and heifers.

The area of pasture in Great Britain is nearly 4,000,000 acres more than twenty years ago, and represents over 52 per cent. of the cultivatable area of the country. Laying down to pasture is a better course than allowing the land to be absolutely valueless. When, however, our imports show there is a demand in this country for dairy produce at paying prices, and when we know that tenants of skill and sufficient capital are prepared to rent small holdings for dairying, every endeavour should be used to point out that such dairying can be carried on without having a great area of permanent pasture. It can further be shown, that though this system will involve employment of more labour, it will return greater profits to the cultivator than if land no longer profitable for wheat be used for nothing more productive than permanent grass.

Ensilage.—The introduction of ensilage has, moreover, rendered dairying on arable land far easier than was previously the case. As long as it was considered that ensilage could only be made in specially constructed silos of brick or concrete, only landowners could ordinarily prepare it. Now it has been shown that it can be made in stacks with portable mechanical pressure, or in “clamps” with no other pressure than the dead weight of earth, it is practicable for any tenant to convert his green crops into this product. If grass which would otherwise be made into hay is converted into ensilage, its feeding properties are much increased. The same grass which will make three tons of hay will make ten tons of ensilage, while a ration of 50 lbs. per day of the latter has been proved equal to 20 lbs. per day of the former. But a far greater advantage in the use of ensilage is that it is possible to utilize such forage crops as have just been named for making it. These give perhaps four times as much produce as the best meadow grass, and more than twice the weight of two cuttings of ordinary clover; and while making the cheapest possible food when fed green during the summer months, the unconsumed surplus can be converted into ensilage equal in nutritive power and quality to that made from meadow grass or clovers. In many cases cows have been fed throughout the winter on ensilage alone with good results, the quantity of milk being greater than when their food was hay and roots. Probably the most reliable information upon this point are the answers obtained to official inquiries of the Agricultural Department made in relation to this very point. From these it appears that out of nearly 300 persons using ensilage for dairy cows, none experienced an unfavourable change, only 22 noticed no

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difference, and of the remaining number 250 considered their yield of milk improved in quality or quantity, 95 of them being of opinion that there was an advance in both respects.

United action by small tenants.—Even, however, when tenants of capital and skill are prepared to take small farms, the land cannot be readily found without some means of union between themselves in order to approach the owner of a large property. On this point, again referring to my own experience, in the same season in which the applications for small dairy farms, to which I have referred on page 188, were received, a farm of 450 acres became vacant unexpectedly, owing to failure of the tenant. This property was within half a mile of a station, twenty-six miles from London, and five miles from an important growing town. Both its position and characteristics were of a character suitable for small tenants. Had there been any possible means of inter-communication between the latter, so that eight or ten could have agreed to take up the whole property, this arrangement could have been carried out, the owner being willing, under those conditions, to have erected the necessary sets of buildings. It was, however, impossible to so deal with this property without simultaneous action. The farm, therefore, had to remain for a time under a bailiff, while the ten tenants which it might have been supporting remained without occupation, living upon their small means. If, therefore, an Association be formed, as suggested in Chapter IX., it can even without capital perform a useful work by registering the wants of small tenants, classifying their requirements as far as possible, and bringing together those who are likely to want the same class of property. Many present owners would place them-

selves in communication with such a society, and would be glad to provide the small farms required.

If no society be formed including this as a special object, it would certainly seem to be a practical class of work which the newly-formed Agricultural Union could undertake with much benefit to those interested.

Settlement of hand-husbandry farms.—Numerous as are those who wish to take small farms for dairy purposes, and who are competent to do so, there is a still larger number who would be willing to take such farms as are referred to in Chapter IV. if means of co-operation could be provided of the character indicated in Chapter VI.

This class will comprise the village carpenter, the rural mechanic, and the country shopkeeper. When these classes originally settled in the country they may have been able to obtain a prosperous living. Now, when those who have formerly been employed as labourers on the land are forced to go to the towns in consequence of lack of employment on the land, and when landlords and tenants under the present conditions of farming have year by year less money to spend on permanent works, these rural trades, which were once prosperous, are failing to find support for those formerly dependent upon them. From my inquiries I am certain that many of this class would gladly avail themselves of some independent holding of a few acres if provided with such assistance as would render certain the realization of products at a fair price. This class have sufficient skill for such a holding; a knowledge of some industry by which they could employ profitably the time which was not wanted upon the land; and sufficient money to purchase a cow and pigs; though they would not have the skill, capital, nor inclination to take the risks of renting forty or fifty acres,

which is about the smallest farm now available from which they might be able to get a living under existing conditions.

In the first chapter it was shown that hand-labour farms cannot be successful if isolated and independent. Such settlements, however, as are named in Chapter VI. would comply with every condition necessary to gain satisfactory results from a hand-husbandry farm. On such settlements there would be no risk in the realization of produce; union with others is provided for by which harvesting could be economically effected; special advantages would be gained by the erection of the general farm and factory buildings; manure and food could be purchased when desirable at the same price as if obtained in large quantities; and there would be special opportunities for tenants to avail themselves of the profits of any industry in which they possessed skill. With assistance in all these directions such small holdings would certainly be successful.

Present landowners can form such settlements on a basis which may secure an income from land now difficult to let; and this will be a practical means of checking the steadily increasing flow of population from our rural districts. We will briefly notice how a landowner could form such settlements. The greatest difficulty would be the capital for the erection of the buildings. As to this point, under the provisions of the Small Holdings Act, 1892, loans can be obtained for small purchasers at $3\frac{1}{8}$ per cent. of interest. Surely, therefore, it might be safe to assume that assistance would be available at an interest of about that rate for those landowners who were prepared to assist a larger number of small holders than could possibly be created directly by the provisions of the Act. If the rents to be paid by the small tenants were fixed upon a similar basis to that named in

Chapter VI., it would leave a margin over the interest paid for any money so borrowed. This would be necessary to go towards the expenses of management. If the owner were satisfied with a return of $3\frac{1}{4}$ per cent., then, after paying the latter on the whole capital involved, and also the expenses, there would be some balance which would be used for the general purposes of the settlement.

To see how this proposal would be carried out, it may be applied as an example to a farm specially suited to the purpose with which the writer is acquainted. This is a property of 315 acres in Bedfordshire, situated six miles from the nearest town and station, and consisting of 155 acres of arable, and 160 acres of pasture. The former is an exceptionally good condition of cultivation, is under-drained, lying in one block without hedges, and well suited for hand cultivation, which is extensively used on neighbouring land. Some of the grass is old pasture, and the remainder carefully laid down about ten years ago. The difficulties in letting the property were the distance from a station and the inferior house, upon which the owners, who are executors, could spend nothing. A sum of £5500 would have been accepted for this farm, tithe free. Assuming the owner of such a property wished to form a settlement, £2500 would have to be expended in cow-house, dairy, and factory buildings, so that the annual charge at 4 per cent. on this amount added to the value of the farm would amount to £320. The rates and land-tax did not exceed £60, and £20 might be added for incidentals, making a total of £400 per annum. The farm could be divided for twenty-five tenants, each having an average of six acres of arable land, and six acres of grass, and if this plan were adopted an average rent of £16 a year from each tenant would provide the necessary

total. This would make a rent to each tenant of 27*s.* per acre, including all outgoings on the land. In addition to this the tenant would have to pay interest on cost of erection of his cottage depending upon his requirements.

The owner would have no higher expenses of collection than in the case of an ordinary rental derivable from small tenancies, but would have to appoint a factory superintendent, who would be paid out of the proceeds of the factory, in addition to having a farm-house, gardens, and a small acreage of land free. If the owner required only $3\frac{1}{4}$ per cent. nett return, instead of 4 per cent., there would be a surplus of about £60 per year, which, after meeting any of the landowner's extra expenses, could be well expended for the purposes of a club or other general work for the benefit of the settlement.

A landowner by dividing a farm in this manner would be able to obtain rentals in some cases from a property not now readily lettable, either because of its distance from a station or because it is a large arable farm, for which class of property there is so little demand from tenants with sufficient capital. Nor would any risk be incurred, for applications from intending tenants should be first invited, and until a sufficient number came forward to take the land it would not be divided. When it was once let in these small farms there would be practically no chance of a farm becoming vacant, for the tenant-right would after one or two years become of a valuable nature. Transfers of tenancy would then be made on terms arranged between the ingoing and outgoing tenants. The great value attaching to this tenant-right has been a feature much noticed by the writer in his investigations among successful small holders working their land by hand labour.

Land wanted by those who would not be mainly dependent upon it.—But besides intending small tenants who possess skill, it is claimed that there are many who have some capital but no farming experience who want some area of land. As the result of much investigation as to the genuineness of this claim, and of the class from which it comes, there certainly does appear to be a demand for small areas of land from those who have made a sufficient amount for their future needs, or have some occupation allowing them much spare time. It is worth while to give brief consideration to the requirements of this class in order to consider what steps can be taken to assist them to attain their desire. In the first place, they would not become tenants, not only because they do not possess the requisite farming experience, but also because the principal attraction towards the land is a feeling of wishing to own a rural property. Then the land obtained should not be under cultivation, because, not having sufficient skill, the intending occupier would generally incur loss if the land were under crops ; it must be cheap, though in a position which in the future would be suitable for a residential property ; it need not be of a character immediately productive ; the area should not be more than sufficient to grow the dairy and other produce required for consumption by the occupier himself and his friends ; and lastly, it must be situated reasonably accessible to London or to a large town. These requirements differ materially from those of a small tenant, and can only be met with either upon a farm out of cultivation, or upon an area consisting entirely of grass land. The latter description is not obtainable at a cheap price. If, however, such persons wanting land can be assisted to take up areas now out of cultivation, much good

would be effected, and the object of their desires gained. It is estimated that in Essex alone there are over 20,000 acres of land out of cultivation. This is not like the uncultivated waste moorland of Devonshire or Yorkshire, nor the hill slopes of Derbyshire or Westmoreland, but land of inherently good quality, some having been famous in the past for its wheat production. The present conditions of farming are such that it cannot now be cultivated under the usual circumstances at a profit, even if held rent free, and thus has become untenanted. This is the character of land which can be taken up on perpetual leases by those desirous of obtaining a property possessing the requirements last named.

Perpetual leases.—In Chapter I. the possible use of the Small Holdings Act was named, but the disadvantages of peasant proprietorship mentioned. A system of perpetual lease will give all the advantages of the latter without involving the owner of the lease in the difficulties which accompany small ownership. A purchaser of a freehold loses the interest upon the capital invested in addition to having to pay the purchase-money. The annual cost to a leaseholder holding at a rental based upon the freehold value, is the same as if he had been a purchaser, but without having to pay the purchase-money. His title, moreover, is more simple and can be more readily transferred.

The means, therefore, by which the class named can be assisted on to the land, is by a society taking on a ground lease such land as can now be found out of cultivation, but of suitable characteristics for the purposes in view, cutting up the same, and then leasing to those desirous of taking land in this way, and who were prepared to pay their proportional part of the cost of the roads, etc., and to erect

their own buildings. The benefit of this system to the country in general and to the landowner in particular is obvious. Yet the leaseholder would be able to get perhaps fifteen acres at a ground rent of £8 a year, which would have involved an expenditure of £200 if he had purchased the land. He will have it in a poor, unproductive condition, but with the certainty that he will get the full value of all his labour expended upon it, and that any work necessary to it can await his leisure without loss. Such an uncultivated area would moreover allow him an opportunity of exercising special skill, or making experiments in developing its value, and gaining experience before the necessity arises of carrying on ordinary cultivation work.

While this book has been in the course of publication, the writer has met with an experiment of interest in this direction. An offer was obtained of 180 acres of land in Essex, which, though situated under three miles from a station, twenty-eight miles from London, has been uncultivated for certainly four years. It was made known that the land would be let in portions on perpetual lease at a rent of 12s. per acre, on the conditions that every leaseholder should spend at once not less than £150 in buildings, and further have at least £8 per acre to spend upon the land. Within ten days offers were received for taking up the greater part of the land on these conditions.

Conclusion.—The writer has now completed his work. He has shown the difficulties and the uncertainties of a life dependent upon the produce of the land, and at the same time means by which those difficulties and uncertainties can be lessened to the largest possible extent. He has shown how without skill such a living is impossible, but has also referred to experience which has proved it possible for men

now unemployed to be maintained by the proceeds of their labour while they are gaining the necessary skill. And he has also shown how without money it is impossible to succeed, but has pointed out the manner in which capital can be safely invested by those who possess it and wish to help forward the work.

We are confronted to-day by the fact that there are thousands of men unable to get the work necessary for their maintenance. It is also known that there are hundreds of thousands of acres in this country which under hand cultivation can yield additional produce. To raise the whole of the produce which we can profitably obtain from our soil here would probably mean the hand cultivation of at least 5,000,000 acres, employing nearly 700,000 additional labourers.

Having in view these facts, even with a full appreciation of the difficulties of the work, is it not worth while making a practical attempt to bring back men to the land? By making use of the experience of others, it has been shown how the capital necessary for the work in every direction can be rendered safe by the adoption of proper care and management. The only possible failure will be in the fact that comparatively so few can at first be assisted. If, however, the work be once commenced and prove satisfactory at the end of two or three years, it will be possible for many of our District Councils, if created under the Bill now proposed in Parliament, to establish and organize a labour or training farm in connection with their Unions. Though industrial villages, on the principle of the Home Colonization Society, or Home Settlements as suggested herein, must necessarily be slow and probably impossible to be undertaken by local authorities, yet many of our colonies would

be glad to receive labourers who had passed independent tests upon the Labour or Training Farms. The Government of British Columbia has lately made itself responsible for a loan from the Imperial Government of £150,000 to assist in the establishment in that colony of men who certainly will not form such good settlers as those would do who had passed through the training suggested. This fact is sufficient to show that the colonies, or some of them at any rate, would under certain conditions welcome competent trained labour, even though unaccompanied by capital.

In conclusion the writer must state that he does not claim originality for the proposals made herein, for though the drawing up of a practical scheme embodying every branch of work may be new, the details are based largely upon the experience of others. For much of the information given he is indebted to various English books and articles; to certain French and German publications; to translations from Dutch reports; to the reports of the Parliamentary Committee on the subject of "Small Holdings" and "Colonization"; to interviews with the originators of almost all the movements that are named herein; and to various professional friends who have favoured him with information as to the results of small farms on landed properties under their control. His own experience is derived from his honorary official connection with social and emigration work, from his practical experience of farming, and from his acquaintance with Poor Law administration and landed questions, both in this country and in Holland and Germany.

Having possessed this special experience, the writer has yielded to the requests made to him, and in the spare time of a professional life has been able to prepare this publica-

tion. Whether the proposals for the Training Farm and Colonization will be acted upon must depend upon those who have the power, money, time, or inclination to undertake the organization of a work, which, if successfully carried out, will tend to solve the greatest practical problem of the day.

In any case, however, some of the suggestions included in this last chapter are of a character which can be carried out by individual landowners. Moreover, the assistance of the newly-formed Agricultural Union may be able to considerably aid them in this work. Every branch of Co-operation which has been shown to be successful is included in the proposals brought forward by Lord Winchelsea. The proposals, however, are not yet in a sufficiently definite shape as to enable a correct opinion to be formed as to whether they can be put into practical operation. If they can be, and if the Union obtain the co-operation of landowners and the support of sufficient capital, then the organization will prove an effective means not only of improving the condition of those now dependent upon our agriculture, but also for making a larger number of persons directly interested in the land.

APPENDIX A.

The Settlement at Frederiksoord.—By permission of the Journal Committee of the Royal Agricultural Society I herewith append an extract from the article written upon this subject by Mr. Ernest Clarke, published in that journal in December 1891, and referred to herein on p. 16—

“Upon becoming a free farmer the labourer receives from the Society a cow, manure worth about £7, four bushels of potatoes for planting, a ton of hay, and a ton of straw, the cost of the cow and manure being repayable by a small annual charge. The free farmer is obliged to insure the cow in the Mutual Insurance Company of the colony, and has to pay 10s. 10d. per annum for medical attendance. Otherwise he works the farm for his own benefit, and as he chooses, though under the general supervision of the director, and subject to the restriction that hay, straw, and manure must not be sold away from the colony. He may also work for wages outside the colony if he likes; and in summer some go into Friesland for the hay-making. The rents are generally well paid, and whilst the lazy and improvident are not encouraged, the administration is as lenient as possible with regard to arrears.

“The dwellings on the allotments of the farmer and labourer colonists are erected upon a uniform plan, very much upon the original pattern. Each allotment is laid out in a rectangle, having the house towards the road at one end, and

the other reaching fifty feet into the allotment. The cottages are all built of brick, with glazed windows in the gables; and, as is customary in Holland, attached to the opposite gable is a wooden erection of the same breadth and height, under a prolongation of the same roof, and from twenty to thirty feet long. The wooden annexe contains a place in one corner for one or two cows, and serves both as a lobby to the house and a general store or barn. The houses consist of one living-room on the ground floor, about fifteen or sixteen feet square, fitted with box beds, and floored with tile or brick, with an attic over it of the same size. Nearly all the houses are now provided with a second small room floored with timber.

“ Around each labourer’s cottage is from half to one acre of land on which to cultivate potatoes and vegetables for the use of the family. The colony gives the family on arrival a sheep, which is kept for its milk. The sheep is usually stalled in the cow-house, but when the weather is fine it is tethered to a rope, and allowed to graze on a small piece of grass land in the labourer’s garden or along the roads.

“ The estate comprises about 5000 acres of sandy and gravelly soil, formerly covered with peat, which has long since been removed; and what was formerly beneath it is now left as the surface soil mixed with vegetable matter. Of the total area, 1250 acres are taken up by six large farms, managed by the Society itself with the work of the labourers; 1500 acres consist of woods, and more than 1500 are cultivated by the free farmers, the remainder consisting of roads, canals, heath, and open spaces.

“ The cultivation of the land is of course adapted to the nature of the sandy soil, but the processes are all primitive, as the object is to find employment for a large number of

people rather than to economize labour by the use of machinery. The ordinary course of cropping is (1) rye, (2) oats, (3) buckwheat, (4) potatoes, but not always in this sequence. After the rye is harvested, stubble turnips and spurrey are taken on portions of the land the same year, and ordinarily a part of the potato course is sown with white turnips, and more extensively with kohlrabi. Only about one-tenth of the corn-breaks is sown with clover and rye-grass, as clover only succeeds well when sown once in every eight or ten years. On the highest land broom is sometimes sown in the rye and allowed to grow the next year, thus displacing a crop of oats; in the autumn it is ploughed in green as manure, and is followed the next year by potatoes. Of late years greater attention than before has been paid to the cultivation of root crops, such as turnips, kohlrabi, and carrots, and to fodder plants, such as vetches, clover, and maize. The green fodder is ensiled either beneath the ground or in stacks by Blunt's apparatus. Potatoes are kept in large low barns, partly dug out of the sandy soil, and roofed with thick layers of turf."

APPENDIX B.

German farm labour colonies.—By permission of the editor of the *Nineteenth Century* I append extracts from the article by Lord Meath in that review for January 1891, and as named herein on p. 20—

“On August 17, 1882, Pastor von Bodelschwingh opened his first labour colony at Wilhelmsdorf near Bielefeld. Some months previously he had purchased a farm-house and land situated in a wild, retired situation some seven miles distant from the town. . . . Pastor von Bodelschwingh was fortunate enough to obtain the assistance of the provincial council, which undertook to make him an advance without interest of £2000. By means of this money, supplemented by voluntary subscriptions, he was enabled to purchase the farm, which he gradually extended, so that in 1889 he had acquired 1500 morgen, or about 1000 acres, at a cost of £6000. . . . Up to the end of September 1890, Wilhelmsdorf had sheltered and found employment for 5400 colonists. About 3200 of these were Protestant, 2180 were Catholics, and about 20 were Jews. Only 274 proved themselves unworthy of the assistance received by leaving the colony in a dishonest or improper manner, while situations have been found for 2545. In all the 22 country labour colonies of Germany 40,000 had been received up to the end of June 1890.

“On December 13, 1882, four months after the opening of the colony, the late Emperor Frederick, then Crown Prince of Prussia, in a letter accepting the position of patron, said—

“‘If the establishment at Wilhelmsdorf has succeeded during the short time it has been in existence in saving hundreds of morally shipwrecked men apparently lost to society, and has won them back to work and to order, it may truly be said that it is an institution which deserves the sympathy and active support of all who have at heart the healthy development of the national life.’

“The colony has a very different appearance now from that which it presented when it was opened. Then there was no road by which it could be approached ; now, in great measure through the industry of the colonists assisted by the local authorities, a road has been made. The rugged heath and scrub have disappeared, and in their place are acres of land under excellent cultivation or laid down in grass. The visitor to Wilhelmsdorf starting from Bielefeld follows the main road for about an hour and a quarter, and then for the last quarter of an hour passes over the private road through the property until, after crossing a small stream, he finds himself before a substantial-looking building, which is in reality an enlarged farm-house, behind which are stables, barns, and piggeries, partly built by the colonists themselves. The building and its annexes have accommodation for 200 labourers, which on an emergency can be stretched so as to house 500. The hausvater or manager lives with his family in the upper part of the house. Opposite to the entrance is an office in which the detailed accounts connected with the farm are kept ; and next to this is the kitchen, the special domain of the manager’s wife, who is assisted in her labours by two maids. . . . ‘Pray and work’ is the motto of the colony. No one is allowed to idle ; each hour is marked out for work, prayer, sleep, and refreshment of body and mind. Pastor von Bodelschwingh is of the opinion

that if he does not fill up every hour with wholesome work or needful refreshment the devil will find occupation for idle hands and brains. Those who are too weak for field labour are provided with occupation of different kinds in the house, and the very feeble are set to easy tasks such as housework, potato-peeling, etc. A farm of 1000 acres cannot be worked without stock. This has from time to time been increased in order to furnish manure in sufficient quantity for the light sandy soil, and to keep pace with the acreage under cultivation. The colony possesses 8 cart-horses, 3 foals, 5 draught oxen, 23 milch cows, 14 oxen and calves, 130 sheep, and 78 pigs. About 200 acres are in cultivation, or have been planted. The value of the land under agriculture when the farm was purchased has been increased two- or three-fold by a scientific system of husbandry and by more thorough manuring.

"The colonists consist of almost all classes. When I visited them in October last I found several who had received a University education, including a theological graduate. It is marvellous with what ease the 200 men I found in the colony seem to be managed, especially when we remember the usual characteristics of the tramping community; and our astonishment increases when we are told that about half this number have at some time or other received correction at the hands of the magistrates. In this institution punishments are unknown. Serious warnings and reprimand, and if these do not answer, dismissal, are the only means of obtaining discipline. The cost of the establishment amounted in 1888 to £3011 per annum, whilst the expense of maintaining each colonist per day was 53½ pfennigs, or about 6*d.* per day per head. For this sum, coffee and bread-and-butter is given at 5 a.m., bread-and-

butter at 8.30 a.m., thick soup (or meat two days in the week) at noon, coffee and bread-and-butter at 3.30 p.m., and soup with bread and potatoes at 6.30 p.m.

* * * * *

“The rapidity with which labour colonies have spread through Germany shows that public opinion in that country is persuaded that these institutions have proved themselves to be effective sieves by means of which the honest industrious man driven by misfortune to seek work can be distinguished from the idle, vicious vagabond who shuns all labour, lives upon the ignorance and soft-heartedness of society, and who by constant fraud and deception hardens the heart of the public, closes its purse, and is the enemy of both rich and poor.

“The public conscience is so thoroughly alive to its duties towards these unfortunate classes, that we may rest assured this particular method of dealing with them, which has proved so successful in Germany, will not continue to be much longer neglected in this country.”

APPENDIX C.

Hadleigh Farm Colony.—The following description of the colony is taken from *All the World*, the monthly publication of the Salvation Army, for July 1891, and is referred to herein on p. 24—

“The estate is within an area of one and a half miles square, and is distant from London thirty-seven miles by road, and forty-one by water. It consists of the Park, Castle, and Sayer’s farms, which comprise, with about 100 rented, 1150 acres. One thousand acres are under the management of duly qualified and practical superintendents, namely, 80 present arable and 45 grass, to be ploughed up under the market gardener superintendent, with 290 arable and 585 grass, under the other superintendent, the difference making the total area named being saltings.

“The 80 acres of arable for market gardening are on the high table-land adjoining the London road, which borders the colony on the north, and are in first-class cultivation. With regard to the 200 acres of saltings which have been periodically covered by the high spring tides, it is proposed to embank these sufficiently high to prevent the influx of water, and then by careful subsequent treatment, it is thought that in the course of a few years they may have a freehold value of £30 per acre. . . .

“In addition to the ruins of Hadleigh Castle, the unruined buildings on the land when we took possession consisted of Park Farm-house, a good-sized and well-built brick house; and the Castle Farm-house, which is rather old-fashioned

and incommodious, with the outbuildings, sheds, etc. belonging to each. Since these houses alone are valued at £2000, and some of the land belonging to Park Farm has been estimated at £60 per acre, the price of the entire estate, which was £19,000, cannot be considered excessive. Since the original purchase a small farm of 60 acres adjoining Leigh station, and extending to within 600 yards of Park Farm, has been secured, with the object of obtaining better access to the station."

APPENDIX D.

Cost of Hadleigh Farm Colony.—The balance sheets issued by the Special Inquiry referred to herein on page 30, show the amount expended upon the colony up to September 30, 1892, after crediting all receipts, to be as follows—

	£	s.	d.	£	s.	d.
Buildings and 1135 acres of land ...	21,190	0	0			
Foreshore and fishing rights over 1500 acres ...	4,800	0	0			
Legal and other costs of purchase ...	443	10	4			
Cost of freehold properties ...				26,433	10	4
14 detached buildings for colonists ...	4,919	14	4			
Buildings for officers ...	3,324	10	7			
Expenditure on farm buildings ...	3,929	18	9			
Refreshment room and barracks for public use ...	877	11	6			
Workshops for building department and other industries ...	1,015	18	10			
Plants, fruit trees, and labour on land ...	887	11	4			
Railway, wharf, tramway, brickworks, etc. ...	13,320	13	7			
Cost of permanent works ...				28,275	18	11
Plant at wharf and brickyard ...	2,619	3	4			
Bricks and materials ...	1,810	15	3 ¹			
Furniture for officers and colonists ...	1,149	19	10			
Machinery and implements ...	2,307	0	9			
Live stock, hay, straw, tillages, etc. ...	6,017	2	3 ¹			
Cost of plant, implements, furniture and stock				14,204	1	5
Loss on working to September 30, 1892				6,422	6	8
Total cost				75,335	17	4

¹ These two items are the value of the Stocks given in the working account, which are brought into the balance sheet as a total of £8,254 16s. 9d. If this latter is correct, it would make the expenditure £426 19s. 3d. in excess of the amount shown. The above does not include expenditure on uncompleted works. Thus it appears that at the time of the Report £2425 would be due on the contract for the Railway when it was finished, and the Wharf and Brickworks were also incomplete.

APPENDIX E.

Test farm for intending emigrants.—The under-mentioned report on this property, referred to on page 146, has been supplied to me—

“The work was begun in May 1891, as a result of a suggestion from the Rev. F. B. Meyer, and from the experience of Mr. Hazell, as to the need of specially testing some applicants for emigration. A small farm at Langley, eight miles from Audley End Station, Essex, was taken. There are only about twenty-eight acres and a small farm-house, into which eight men are received at a time, though during the spring season, when the openings in Canada are numerous, as many as fourteen are taken, the extra number being boarded in the neighbourhood. The persons helped are of various classes, the only condition being that they cannot make a living in England, and yet profess to be able and willing to work on the land if they are given a chance. They are taken from lodging-houses and other places, and as a first test, are instructed to walk to the farm, a distance of about forty miles from London. Upon arrival at the house, their clothes and persons are cleansed, a process which is sometimes very necessary. They then enter upon the simple life of a country cottage farm, the working manager and his wife making the centre of a Christian family, and there is no suspicion of barrack life. They are taught the rudiments of farming, including milking, and the care of animals. If they are palpably idle and indifferent they leave of their own accord, or are dismissed. If they seem to be

industrious, and anxious for colonial life, they are generally sent to Canadian farms through the Self-Help Emigration Society, whose correspondents in Canada obtain work for them at once. As to the results, sixty-five cases have been dealt with up to April 30, 1893, of whom four never arrived on the farm, and presumably the walking test weeded them out. Of the remaining sixty-one, thirty-four were sent to Canada and New Zealand, five were found employment in England, and there were still at the farm nine men and youths.

“The cost is considerable, and has hitherto been about £5 for each case dealt with. At first this was partly provided for by donations, but more recently persons interested in cases have contributed 5s. a week towards their maintenance, and the balance is made up by the Honorary Director, Mr. Walter Hazell, 15, Russell Square, London, W.C. As the persons tested have no knowledge of farming when they arrive, their services are of scarcely any value, as they leave as soon as their farming education has fairly commenced. They have unlimited supplies of plain, wholesome food, which soon improves their bodily condition. The moral and social results appear to be very satisfactory, but though the farm loss is diminishing, there is no likelihood of such an effort being self-supporting. Mr. Hazell will be pleased to correspond with any who are interested in this movement.”

THE END.

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